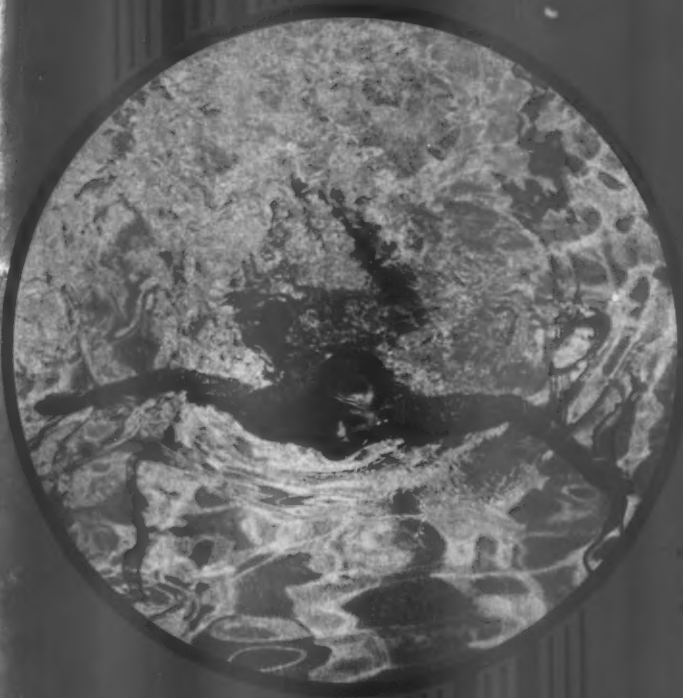


ATHLETIC JOURNAL

Vol. XXIII, No. 4

December, 1942



Today's Swimming Needs
W. F. Foster, Lieutenant U. S. N. R.

Passing Pointers
Evelyn S. Dean

The Gymnastic Program's Con-
tribution to Pre-Flight Training
Charles J. Kearney, Lieutenant U. S. N. R.

Suggested Routines for the
School Gymnastic Program
Harley Price, Lieutenant U. S. N. R.



For Victory in '43 CHOOSE SEAL-O-SAN

NEW BASKETBALL DIGEST

A completely new edition of the popular Seal-O-San Basketball Coaches Digest is just off the press. Filled with articles, play diagrams, photos, and suggestions on Offense, Defense, and Fundamentals by America's leading coaches. Your copy is free for the asking. Clip the coupon—today.



The Huntington Laboratories, Inc.
Huntington, Indiana

Please send me a free copy of the new Seal-O-San Basketball Coaches Digest.

Coach _____

School _____

City _____

State _____

YOUR bid for a place among the top-flight basketball coaches of 1943 depends on *your* course of action now!

Fundamental strategy requires that you start the season on a 100% non-slippery gym floor—and that means Seal-O-San.

For Seal-O-San helps give you an offense and a defense that "clicks!" You'll see your team win victory after victory. You'll see them pivot, pass and shoot in championship style.

Seal-O-San's 100% slip-proof surface gives your players *positive* traction for quick starts and stops. It makes teaching of fundamentals easier. It builds confidence . . . morale . . . the will to win.

Moreover, serious accidents from skids or falls are avoided. Thus, Seal-O-San helps to keep your best shots in the game . . . keeps your winning combination intact.

Make 1943 *your* Victory year. Put a mop-applied, easily maintained, low-cost Seal-O-San finish on *your* gym floor, and—like 5350 other successful coaches—start yourself on the way to top honors.

THE HUNTINGTON LABORATORIES INC

DENVER

HUNTINGTON, INDIANA

TORONTO

SEAL-O-SAN

SEAL AND FINISH FOR GYMNASIUM FLOORS

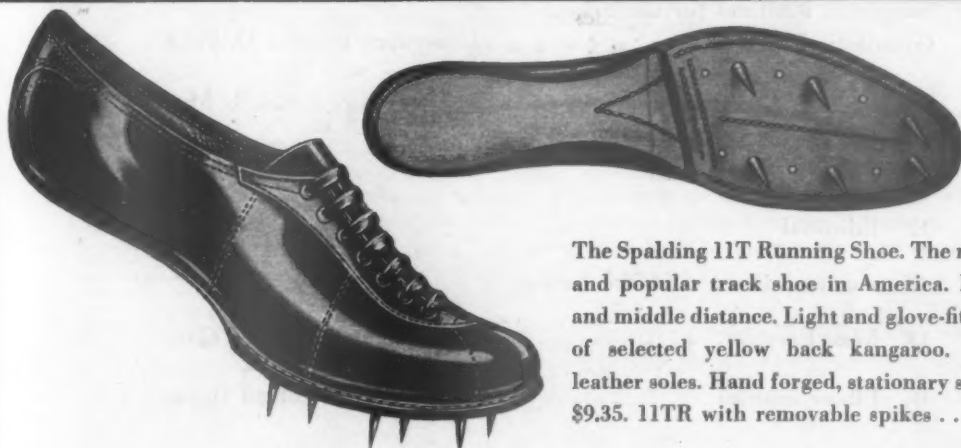
SPALDING

the split-second difference



● In track shoes, as in track champions, it's the split-second difference that counts. You credit a champion's success to that last drop of drive, that *extra* ounce of stamina. Spalding is famous for the "extras" that make its track shoes the choice of America's foremost coaches... *extra* comfort, *extra* snugness of heel fit, *extra* firmness of spikes, *extra* durability... these are just some of the split-second differences that have built the great reputation of Spalding track shoes.

SPALDING SETS THE PACE IN SPORTS



The Spalding 11T Running Shoe. The most successful and popular track shoe in America. Ideal for dash and middle distance. Light and glove-fitting—turned-of selected yellow back kangaroo. Flexible Oak leather soles. Hand forged, stationary spikes... Pair, \$9.35. 11TR with removable spikes... Pair, \$10.00.

A. G. Spalding & Bros.
DIVISION OF SPALDING SALES CORPORATION

TRACK EQUIPMENT

CONTENTS

for December, 1942

PAGE

- 5 Today's Swimming Needs.....Lieutenant W. F. Foster
- 6 The Swimming Program at Tulsa Central
High School.....Otto J. Endres
- 7 Passing Pointers.....Everett S. Dean
- 10 The Gymnastic Program's Contribution to
Pre-Flight Training.....Lieutenant Charles J. Keeney
- 12 Editorials
- 11 Suggested Routines for the School
Gymnastic Program.....Lieutenant Hartley D. Price
- 24 A Change of Pace in Basketball.....Cecil R. May
- 31 Trainers Section
- 32 Editorial
- 32 Athletic Trainers in the Service
- 33 Mass Exercise.....Lieutenant M. J. Gary
- 38 Elbow Injuries.....Roland Bevan

PUBLISHED MONTHLY except July and August by the Athletic Journal Publishing Company, 6838 Glenwood Avenue, Chicago, Illinois, Member Audit Bureau of Circulations. Request for change of address must reach us thirty days before the date of issue with which it is to take effect. Duplicate copies cannot be sent to replace those undelivered through failure to send advance notice.



SUBSCRIPTION PRICES: \$1.50 per year; \$2.00 for two years; \$2.50 for three years; 90 cents for six months; 75 cents for five months; Canada, \$1.75 per year; foreign, \$2.00 per year. Single copies, 25 cents. Copyright, 1942, The Athletic Journal Publishing Company. Entered as second-class matter, August 14, 1923, at the post office at Chicago, Illinois, under the Act of March 3, 1879.

IF YOU ARE CONSIDERING

NEW UNIFORMS

DON'T OVERLOOK

the IMPORTANCE of

40-X

WHAT IS 40-X? 40-X is 1947, the year of our Victory, the time that must be made as short as possible, through everybody's United Effort.

HOW DOES 40-X affect your purchases of new uniforms?

When you buy anything today, you must buy it with the future in mind. None of us know what shortages of materials and manpower lie ahead; replacements may be out of your reach later on. Therefore, the wise buyer will buy today's uniforms with an eye toward tomorrow's needs. . . . The woven-in super-service qualities of Kahnfast Athletic Fabrics are made to order for the strenuous requirements of 40-X Planning. Ask your uniform maker — write us today for swatches.

Uniform makers have adequate supplies of Kahnfast Athletic Fabrics; however, early orders are suggested, because many companies are being kept busy by Uncle Sam.

("40-X" symbol, courtesy of Modern Industry Magazine.)

KAHNFAST ATHLETIC FABRICS

444 FOURTH AVENUE, NEW YORK

BASKET OR GRENADE...



THEY'VE got it in 'em to win! Add to speed and stamina, that vital urge to victory . . . and that's what so many of our fighting lads have learned in the rough and tumble of basketball play. They'll be spotting grenades with the same deadly accuracy they have used in sinking baskets.

THE 1941-1942 edition of the Converse Basketball Year Book, pictures many of the youngsters who are now "shooting

them home" for Uncle Sam. Nearly three hundred basketball teams and thousands of players are shown in this 52-page Year Book, now in its 21st year. The record of outstanding tournaments, plus technical articles by leading coaches, makes this edition particularly valuable and interesting.

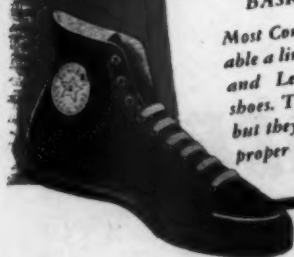
A LIMITED number of copies of the Year book is still available. We'll fill requests as received. Write for your copy . . . soon.

THE CARE OF BASKETBALL FOOTWEAR

Wash inside and out with mild soap-and-water. Allow to dry thoroughly at normal room temperatures, never near heat or in sunlight. Repair breaks or tears in uppers. Lace loosely and stuff with tissue paper. Store in cool, dark place.

THE CURRENT SITUATION ON CONVERSE BASKETBALL FOOTWEAR

Most Converse distributors have available a limited quantity of All Star, Jr., and Leather Court Star basketball shoes. They're "wartime" construction, but they'll give satisfactory wear with proper care.



CONVERSE
Chuck Taylor
ALL STAR
BASKETBALL SHOES

CONVERSE RUBBER CO., Malden, Mass.

CHICAGO 212 W. Monroe Street

NEW YORK 200 Church Street



Instructors demonstrate leaping and swimming through burning oil.

IN PRE-WAR days the accent of youth was on speed, and swimming, like most other things, responded to the urge to go faster and faster. Coaches racked their brains to figure ways and means of cutting down water resistance. Instructors of non-competitive swimmers followed suit by scrapping the rest strokes, and because of the highly sensitive sinuses of the contemporary youth, under-water swimming was abandoned. The crawl, the racing back and butterfly breast strokes flourished in every city and hamlet where a pool, lake or ocean offered a place to make or break records.

Times have changed! We are at war! And the ability to swim is no longer just a means of recreation, but, to men in the Navy, a life and death necessity. Mastery of speed strokes is now not half so important as learning to stay afloat for long periods of time, to conserve strength and escape injury. The butterfly breast stroke, for instance, is not suitable at all for swimming through burning oil, and the crawl looks pretty energetic to a man who must master a big mess of ocean, if he is to be listed among the survivors. So, the swimming coach and instructor of today should do an "about-face" and adapt his program to the present needs of our fighting forces.

Thirty per cent of the naval aviation cadets who enter the Georgia Pre-Flight School are non-swimmers, and this can be used as a fair gauge of men in other branches of service. The incoming cadet ranges from eighteen to twenty-six years of age. His co-ordinations are pretty well set by this time and the old adage that, "It is a hard job to teach an old dog new tricks," certainly holds true in teaching a grown man something he should have learned while in grammar school. For this reason, it is recommended that every male student in the high schools and colleges be given a compulsory course in swimming and life saving and that his

graduation be contingent upon the completion of a swimming requirement.

The swimming program, as carried on at the navy pre-flight school at the University of Georgia, follows a prescribed syllabus, as far as facilities will permit. The swimming coaches are confronted with the problem of varying classes as a new battalion of cadets arrives every two weeks. These battalions are made up of men from the fleet, from high schools and colleges. After three months of training they leave for primary bases.

Each cadet is tested upon his arrival to determine his ability in swimming. If he cannot pass the basic D and C tests, he is classified as a non-swimmer and will receive special instruction five afternoons a week. The proven swimmer will attend ten instruction periods to acquaint him with methods and skills found valuable in war conditions. All cadets are taught the following skills: 1. Elementary back stroke. 2. Breast stroke. 3. Side stroke. 4. Jumping into water. 5. Under-water swimming. 6. Swimming clothed.



Swimming with clothes on.

Today's Swimming Needs

By W. F. Foster, Lieutenant U.S.N.R.

Head Swimming Coach
U. S. Navy Pre-Flight School
Athens, Georgia
Formerly Swimming Coach
Southern Methodist University

IN the two swimming articles in this issue, we have presented the requirements now found essential in today's navy swimming program and a well-developed high school program as prepared by Otto J. Endres when he was at Central High, before going to Will Rogers High in Tulsa. Swimming coaches are already planning to make additions to their programs to meet the essentials of navy programs. Coaches everywhere are seeing the need that every boy be taught to swim.

7. Swimming carrying material. 8. Floating. 9. Finning. 10. Sculling. 11. Treading water. 12. Towing. 13. Life saving carries (orthodox and unorthodox). 14. Supporting victims. 15. Two-man carries. 16. Making use of trousers and shirts for supports. 17. Bobbing with packs. 18. Surface diving.

The fact that speed strokes are not listed in this outline does not mean that they should be eliminated from a well-rounded swimming program, for they have a definite value in building stamina and endurance. The point is that the skills should not be sacrificed in their favor. Speed strokes are used here in the competitive sports program along with the rest strokes and under-water swimming.

A certain amount of time is reserved each day to examine cadets on the progress made in skills. Beginning with the least difficult, the D test, the coaches take the cadets as rapidly as possible toward the ultimate goal, the A tests.

The tests are as follows:

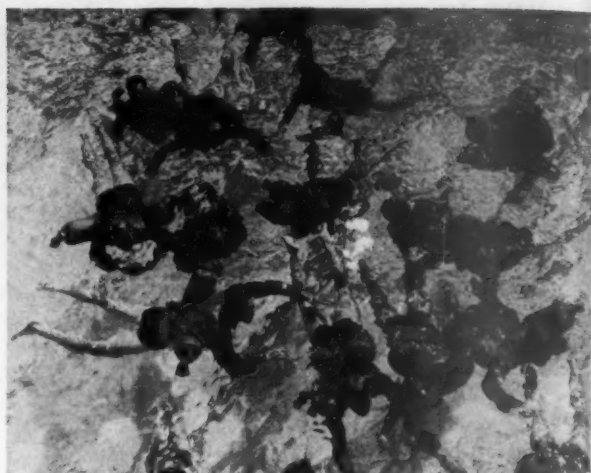
D—The cadet must remain afloat for



Learning the technique of using a rubber raft.



Swimming under water with fins.



Swimming with trousers as emergency life buoy.

five minutes by swimming, floating, treading water, or by a combination of these methods.

C—Required swim of 100 yards, alternating at twenty-five yard intervals with the breast stroke, the side stroke, the back stroke and the crawl.

B—1. 150-yard swim in four and a half minutes from a diving start, the first fifty using the crawl, the second fifty either the side or breast stroke and the last fifty

the elementary back stroke. 2. Jump from a ten-foot tower, feet first into water and swim seventy-five feet under water. 3. 60-foot tired swimmer's carry.

A—1. Half-mile swim using any style. 2. 50-yard swim fully clothed. 3. Running jump from a ten-foot board and 20-yard under water swim. 4. Breaking of both front and back-strangle holds, followed by an optional carry of twenty yards. 5. Satisfactory use of artificial

respiration.

The swimming coaches feel that a cadet who leaves here, having passed the A test, is a good risk in any man's service, so we work toward that end.

We have a job to do. We feel that it is an important one, and you can make it easier by sending us swimmers taught along the pattern suggested in this article. So, bear a hand, mates, and let's "Keep them flying!"

The Swimming Program at Tulsa Central

By Otto J. Endres

Formerly Swimming Coach at Central High, Now at Will Rogers High

THE swimming program in use at Tulsa Central High School in Tulsa, Oklahoma, has been developed by the writer since 1923. This program is three-fold, consisting of instruction in the various swimming strokes, fancy diving, life saving; intramural competition in swimming, diving and water games; and an interscholastic program of competition.

During the first few years of development of this program, swimming classes were held with mixed groups of boys of varying degrees of abilities and skills making a progressive course of study and advancement almost impossible. Gradually a plan was developed, wherein beginning and mediocre swimmers were encouraged to enroll for class work for a nine-week period and then another nine-week period was opened to the boys of more advanced ability. Swimming at Tulsa Central is not compulsory. The students have the privilege of selecting any activity such as tennis, swimming, basketball, gymnastics, touch football, softball, wrestling, cross-country running or track, providing in their sophomore year they put in nine weeks of beginning gymnastics and calisthenics.

The program as developed and now in operation in the swimming classes is for nine-week periods, two in each semester. The initial nine weeks, beginning in September, are given over to the boys who are advanced swimmers and have an opportunity to pass their junior and senior life saving tests as outlined in the American Red Cross schedule. The second nine weeks are open to the beginner and sinker type, this class being composed almost entirely of sophomores, a few juniors and seniors who have not had previous opportunity to learn to swim. In this nine-week period all phases of swimming are touched upon which are of a fundamental nature. In this period the sinker is advanced to the beginner stage, the beginner to the swimmer and then the swimmers are given practice on the Red Cross life saving tests. In the third nine weeks which is the first of the second semester, beginning around the first of February, all qualified swimmers take the junior and senior life saving tests of the American Red Cross. During this period the class work becomes somewhat boring and competition in various strokes and diving are held with a view to the selection of representative teams for intramural swim-

ming after school. These intramural competitions develop swimmers who will be advanced to the sixth-hour squad of swimmers for interscholastic competitive training. The final nine weeks are given over to a mixed group of swimming classes of a more informal nature with relay-team and diving competition.

As I stated previously, swimming is not compulsory but it is a very popular sport and few boys have been graduated from Central High School who do not know how to swim. In a number of the classes one finds boys who, because of physical handicaps such as paralysis, malformations, and other muscular and structural defects have a chance for muscular development and, in some cases, we have seen a regeneration of nerve tissues, partially destroyed by infantile paralysis and spinal meningitis.

Class work in swimming is given in five 45-minute periods each day, the enrollment in some classes reaching as high as seventy boys. I have found that a large group can be handled just as effectively as a small one. Enough benches are provided to seat half the class while the other half is working. In some

(Continued on page 26)

Passing Pointers

By Everett S. Dean
Director of Basketball, Stanford University

SOME coaches consider passing the first fundamental of basketball. It is true that passing and ball-handling are a measuring stick for good players. It is necessary that players be better than average in this fundamental because of their many passing opportunities. One bad pass begets another; hence the importance of a super passing attack when we are reminded that there are between two and three hundred passes per game. Poor shooting teams must necessarily spend much time on their passing game in order to work the ball closer in to the basket.

In this article, I should like to discuss two very important passes. They are not team passes, yet both are vitally important to every team's attack. Certain defensive situations call for the use of bounce passes and hook passes; no other passes under those conditions will be as effective. These two passes are discussed in the following paragraphs.

Twenty-six passing pointers are listed here as a vital part of any good passing team.

The Hook Pass

When in doubt, punt! When in doubt, hook-pass! This axiom is almost as true in basketball as the former is in football. The hook pass is certainly a very versatile pass and it is hard to understand why it is not used a great deal more. It is versatile because it is successful when other passes are stopped. A well-executed hook pass is harder to stop than any other type of pass.

The most common usages for this pass are as follows:

(1) To start the fast break from the defensive backboard. Defensive rebound men should have much practice on perfecting hook passes in bringing the ball out and starting the play. This pass is a necessary tool in this particular play situation.

(2) To pass out from the corners, the side lines and midline when the guard has other passes stopped.

(3) To pass over the heads of front-line defensive players to get the ball to the pivot man.

(4) To use in a 2 on 1 fast-break situation by drawing the guard away from the basket with a dribble and then hook-passing over his head to a teammate, cutting to the basket.

The hook pass requires finely co-ordinated movements and much practice on its execution will develop greater co-ordination for all movements. The principle

of getting high in the air over the guard is the thing that makes this pass click. Too many players make an attempt at hook-passing by trying this pass without getting off the floor. In this case the guard has the advantage.

The technique of the pass requires the right hand player to take off on his left foot and to jump into the air as high as possible before passing. On his way up, he should corkscrew or turn his body facing his guard and the receiver. Both hands are used in bringing the ball up to the shoulder from which position it is passed with a snap. The arm is well flexed at the elbow. The plane of the pass is downward in all cases and makes a hard ball to handle. The passer must, therefore, learn to vary the speed of the pass in proportion to the distance. The pass should be made at the height of the jump to get the most of the advantage over the guard. Illustrations 1, 2, 3, 4, 5, 6, 7 and 8 show each stage of this pass. Illustration 6 shows good form in the alighting position. Unless the player alights in a well-balanced position, with feet even and ready to go in any direction, he will find himself completely out of the next play. If the player makes this pass from the corner, he has a fine play possibility before him, by cutting to the basket to take a quick return pass. This cut should be preceded by a good head-and-

shoulder feint in the opposite direction.

A simple drill in Diagram 1 shows two offensive men against one defensive player. The front man dribbles to the corner, closely followed by the guard. The pass is made to the trailer who stops at the near edge of the free-throw circle. Upon receiving the pass, he quickly returns a lead pass to the front man, cutting under the basket for a hook shot.

Drill 2 shows a three-man hook-pass drill which gives the players a maximum number of hook passes from positions on the floor which call for hook passes if the situation demands. These two drills offer game condition drills and should give proper training for the hook pass.

Passing Pointers

1. One bad pass begets another. If this point were fully realized by players, no doubt there would be fewer bad passes. When receiving a bad pass, the receiver should try to regain his balance before passing.

2. Teach a variety of passes which will be used in some game conditions. Avoid teaching any passes which are rarely used.

3. Good passing insures confidence and morale.

4. Good passing teams are hard to beat. They have the tools to manufacture scores and know it. Hence the confidence and morale.

5. Maintain good offensive body-balance throughout offensive maneuvers. This means better passing and receiving.

6. Keep the ball moving. Keep it "hot". When the ball is moving, the offense is alert. More passing lanes open up because of the movements of the defense.

7. Good ball-control makes the defense over-anxious. After several passes the defense gets careless or over-plays the play and someone gets a good shot.

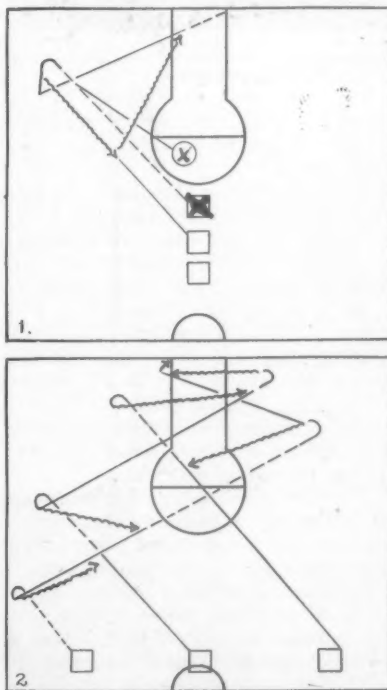
8. Make passes snappy and sharp. There will be fewer interceptions on this type of pass.

9. Avoid careless passing. Lazy, lob passes will cause the offense to lose its sharpness in passing and cutting. That kind of pass is easily intercepted.

10. Don't force passes through. Set offenses cause most of these passing sins. Teams guilty of forcing passes have little patience and little appreciation for good ball-control.

11. Some players try to finesse through too many passes. An interception by a fast-break team is an easy way to score.

12. Learn to use the eyes properly.



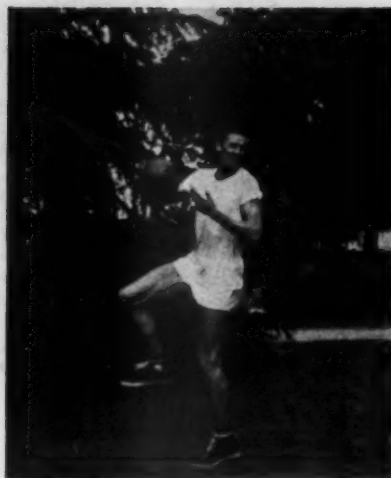


Illustration 1—The take-off.



Illustration 4—Completing the turn.



Illustration 6—Good form in the alighting position.



Illustration 2—Taking off.



Illustration 5—Preliminary position to a correct alighting position.



Illustration 7—Coming out of a fake to the right which precedes a cut to the left.



Illustration 3—The height of the jump and start of the pass.

They are the very foundation for basketball cleverness. More can be done in de-

ception with the eyes than with the hands or feet. Peripheral vision is an important fundamental.

13. Avoid bouncing the ball before each pass. This act invites the guard to try to tie up the ball and will leave the passer in position to be two-timed by two alert defensive men. This is a very bad habit.

14. Precede many passes with fake passes. This will exemplify good ball-handling and will make the defensive player show enough that he will weaken his position against passes. Well-conceived fake passes in certain play situations will cause other defensive players to declare themselves somewhat.

15. Slow cross-court or flat passes are out. This type of pass is too dangerous to try. An interception is two points for the opponents. That type of passing leads to many other bad forms of passing.

16. Avoid fancy passes because they are unsound and most of them go out of bounds or into the hands of the opponents.

17. Do not pass across in front of the



Illustration 8—The drive for the basket made possible by a good alighting position.

opponents' basket. Sometimes it is necessary but on the whole try to develop the

habit of passing away from that area.

18. Don't pass to a man going away from the pass, unless it is a lead pass on a fast break. This rule applies mostly in the short pass maneuvers.

19. Ignore the flat-footed receiver. Receivers should meet the ball and avoid the interceptions.

20. Follow your pass. This is a good rule for it makes possible more natural play situations.

21. Bounce-pass around and under big men. The big man's strength is from his waist up. His weakness is around his feet.

22. Pass to the little man's weakness. That weakness is the high pass. His quick reflexes may stop passes directed at his strength.

23. Learn the technique of the hook pass. When in tight places in the corners, along the side lines, under the basket, the hook pass, properly executed, is a life-saver.

24. Pass to the receiver on the side opposite from the guard. Too many passes are made directly at the receiver. Experience is a good teacher and it takes experience to avoid the above misplay.

25. Always lead the running player. Never make him break stride or have to catch the ball on his hip. Make him reach for a soft pass out in front.

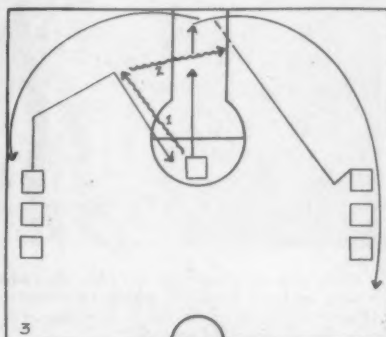
26. Make a soft pass, to a close receiver. Some players, and especially inexperienced players, do not possess this excellent judgment of distance and need for adjustment.

The Bounce Pass

A few years ago it was believed rather generally that the bounce pass fits into certain styles of offense better than others. In recent years, due to many evolutionary changes in offense, it has been found that the bounce pass fits into any style of offense. It is a very versatile pass, used mainly when there is a guard between the passer and receiver. Big men are weaker defensively against this pass than any other pass. It is used effectively in getting the pass into the pivot man and also



Illustration 9—The preliminary position of the bounce pass.



lessen the danger of interceptions. High school and college players should not try forward or reverse English on bounce passes because of the conscious effort it involves. Another very important factor in the execution of this pass is the use of a good eye feint. The defensive man should be faked into a high pass either by use of the eyes or a faked high pass followed with the bounce pass.

The receiver helps the passer a great deal by shaking the guard with fake reverses and starts, stops and feints. Meeting the ball is one of the musts in the passing game. When meeting the bounce pass, the receiver should be in a low crouched position with hands cupped and with his leg advanced on the guard side, for the purpose of blocking him away from the pass.

Side-arm bounce passes from a lateral dribble across the floor are very effective. The side arm is used to reach around the guard in executing the pass. Players with great skill can roll their wrists in this pass and put English on the ball so that it bounces left when the right-hand player passes. Only the most skillful player should use this pass.

The bounce pass can be learned best in its early stages through the circle drill with one man in the center. Passive resistance should be offered by the guard on the first day of work in the bounce pass. Diagram 3 shows an excellent combination drill for shooting, passing and peripheral vision. The player looks at the basket, while in the act of passing, in order to develop the habit of peripheral vision.

The drop pass is used more by Eastern and professional teams. A beautiful cut-away play may be worked from this pass when used along the side line. It is used by teams that employ a considerable amount of movement and passing.

The backhand bounce pass is an unorthodox pass, but is one that may be used very correctly in certain play situations. It is a sound pass under certain play conditions and may be used without fear of being called a "fancy Dan."



Illustration 10—The position of the ball, the follow-through and the head and eye feint.

PASSING POINTERS

One bad pass begets another.

Teach a variety of passes.

Good passing insures confidence and morale.

Good passing teams are hard to beat.

Maintain good offensive body-balance.

Keep the ball moving.

Good ball-control makes the defense over-anxious.

Make passes snappy and sharp.

Avoid careless passing.

Don't force passes through.

Some players try to finesse through too many passes.

Learn to use the eyes properly.

Avoid bouncing the ball before each pass.

Precede many passes with fake passes.

Slow cross-court or flat passes are out.

Avoid fancy passes.

Do not pass across in front of the opponent's basket.

Ignore the flat-footed receiver.

Follow your pass.

Bounce-pass around and under big men.

Pass to the little man's weakness.

Learn the technique of the hook pass.

Pass to the receiver on the side opposite from the guard.

Always lead the running player.

Make a soft pass, to a close receiver.

through the front-line defense.

The proper execution of the bounce pass requires more skill than some other passes. The pass is made from the offensive fundamental position. From this position the player can execute any of the offensive fundamentals without telegraphing his intentions. The hand position on the ball is identical to that of the push pass. The impetus applied to the bounce pass is downward instead of horizontal as in the push pass. Notice in Illustration 9 that the wrists are cocked with the fingers pointing upward and somewhat behind the ball with the thumbs directly behind the ball. The passer imparts a tonic snap to the ball, the snap coming from a combination of muscular actions from the small muscles of the fingers, the wrists, and the extensor muscles of the forearms. The pass should be aimed at a point from six to twelve inches away from the foot of the defensive man (See Illustration 10). The impetus should come from behind the ball and not from on top, thus causing a low bounce to the receiver. The bounce should be slightly above the knees to

Gymnastics and Tumbling

The Gymnastic Program's Contribution to Pre-Flight Training

By Charles J. Keeney, Lieut. U.S.N.R.

Officer in Charge of Gymnastics, U. S. Navy Pre-Flight School, St. Mary's College California

BOTH from observation and reports of verifying surveys we have come to believe that good gymnasts make especially good fliers. Although we are fully aware that the significance of this observation is somewhat modified by the fact that good athletes of most any variety average high in flying ability, we believe there is evidence to substantiate a claim that there is some special close relationship between acrobatics and aerobatics.

There may be some doubt as to whether it is the actual training in gymnastics which contributes to the ability to fly or the possession of a natural aptitude for gymnastics which makes an outstanding flying pupil. There is undoubtedly much of the latter but the chance that there is probably some of the former is eminently worth a gamble. It is therefore to some extent with the idea of eliminating from further training those unteachable, but more with the great hope of contributing something to the aviation teach-ability of the remainder of trainees that we put each cadet through a ten-hour course in gymnastics at the pre-flight schools.

The contributions that may be made through gymnastic training include, of

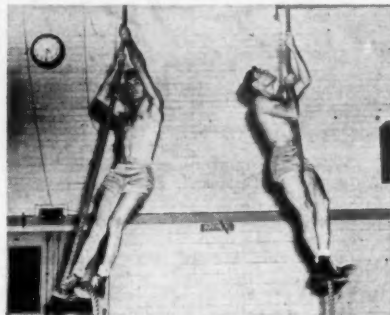
course, improvement of voluntary muscular control, an improved balance, elimination of some of the natural fear of rotations and inversions, improved neurovascular and psychological adjustment to

the sustained inverted position, and a sense of orientation to ground and horizon while turning over and regaining the upright position. There are also the more direct contributions of rope-climbing strength and technique for emergency situations, vaulting of obstacles for cross-country coverage, and the falling-with-a-roll technique to avoid injuries on parachute landings and other more common falls.

There is in addition some evidence that the practice of rolls, etc., may make the individual more resistant to dizziness while gyrating in a plane. However, it is likely that a great deal more of that sort of thing than we are able to give in a tumbling class is necessary for a noticeable effect on the individual's susceptibility to dizziness and also that the improvement would only be found in a situation involving the same type of revolution in the same direction as that practiced. Finally, the most intangible contribution, is in the line of physical courage and daring, wherein from practice one learns to "take a try at it," in spite of that empty feeling that accompanies a premonition of imminent disaster.

The selection of the content of our pre-flight course from the vast field of gymnastic material was made with the aforementioned possible contributions in mind, and on the belief that it was better training and more pleasurable to learn a few fairly difficult things well than to go through a multiplicity of very simple moves or to learn poorly too many different tricks.

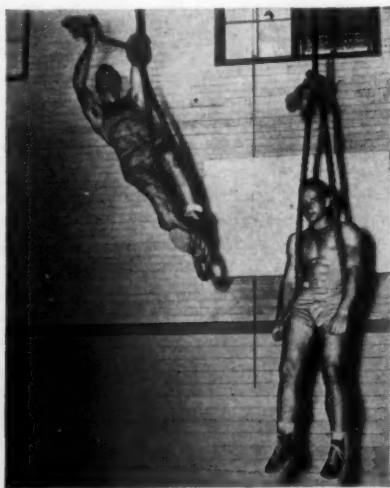
We selected therefore in the line of tumbling to learn very well the forward rolls, backward rolls and the dive and



(Left) The stirrup is a means of using the feet as a break while descending. (Right) The clamp may be used in climbing.



(Left) The "makefast" permits an arm rest midway in a long climb. (Right) The "makefast" foot position may be used for climbing.



(Left) By securing with the feet, the cadet is free to tie a loop, in which to stand or (right) to sit in, if he needs to cling to a rope for an extended interval.



Cadets assist each other learning the forward handspring.

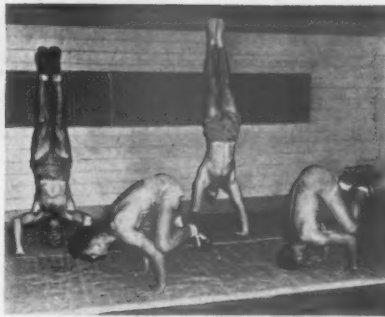


The backward somersault leg pitch with extra hand-spotting.

Tw
used
zonal
roll.
as a
of w
proxi
have
which
the c
shoul
platf
ing b
fall"
backw
hand-
backw
Our
the
straig
up))
to pa
stands
the w
The
orthoc
vario
bars v
use o
tinued
sized
vault
Unc
activi
and d
the ro
crossin
effecti
ing up
ergy
climbi
the cr
are ut
fast a
as me
tended
The
descen
ment
fall a
teach
fore p
on the
board
ous. T
sistanc
rope o



Two traveling techniques which might be used to advantage on various types of horizontal beams and ropes.



Inverted balance work consists of the frog handstand, frog handstand, straight body handstand and ordinary handstands.



The trampoline serves the double purpose of spring-lifting the performer and cushioning his landing.

roll. We added the forward handspring as a challenge, the meeting and mastering of which has given satisfaction to approximately 50 per cent of the cadets who have learned it and the attempting of which has given valuable experience to the other 50 per cent. We added the shoulder (football) roll, the jump from platform and roll, and the backward falling backward roll to teach the "rolling fall" technique. Finally we teach the backward somersault leg pitch with extra hand-spotting to give a safe but thrilling backward air somersault experience.

Our inverted balance work consists of the frog handstand, frog handstand, straight body handstand (from tuck press up), partner-lifted handstands, kick-up to partner-supported handstands, handstands, balancing away from feet against the wall and hand-walking practice.

The vaulting program is almost equally orthodox with some work over horses at various heights and some over parallel bars with mats draped over them. The use of a modified wolf vault, for continued running after the vault, is emphasized and the use of rolls after other vault landings is also encouraged.

Under the general heading of climbing activity are taught vertical rope climbing and descending, technique of securing to the rope for resting and means of safely crossing horizontal ropes and beams. The effective use of the legs is stressed in climbing up the rope for conservation of energy during long climbs and to make climbing possible when fatigued. Both the crossed leg clamp and the makefast are utilized in climbing and the makefast as well as various seats are taught as means of securing to the rope for extended intervals.

The use of the feet as a brake while descending a rope is another essential element in our teaching. It saves many a fall and prevents many rope burns to teach this "stirrup" for coming down before permitting cadets to go up very high on the rope. Its utility for going overboard in time of naval disaster is obvious. The feet are also of valuable assistance in the crossing of a horizontal rope or beam when it is not possible to



The modified wolf-vault into a running stride is taught for clearing obstacles.

mount to the top. The hand and foot under-rope crossing and the straddle side seat over-rope crossing are therefore taught for emergency use.

A most important unit in our program is the instruction on the trampoline. Even though it appears to many observers that the trampoline is an invention specifically for the purpose of training fliers in aerial orientation, the fact is that the idea is borrowed from the stage and circus and put to good use by the Army and Navy Air Corps and the paratroops as a training device. It is a canvas bed suspended by springs from a raised frame. It serves the double purpose of spring-lifting the performer and of cushioning his landing. It permits even the relatively inept performer to execute with comparative safety and comfort aerial body maneuvers previously possible for him only in his imagination.

We have given much thought to our selection of material and put considerable effort on methods of presentation. We believe that we have a good program and we are pleased by the results. But we do not claim that we have made the best possible selection nor are we so satisfied that we are neglecting any attempt to

improve our teaching. We do not claim that gymnastics is the only important part of the pre-flight physical training program, nor that we are making agile acrobats out of average boys. We do contend, however, and I think rightly so, that the gymnastic program is making a valuable contribution to the co-ordination, balance, muscle tone, confidence and equilibrium of the pre-flight cadet and should be an integral part of the physical training of every boy in America.

Suggested Routines for the School Gymnastics Program

By Hartley D. Price, Lieutenant U.S.N.R.

Officer in Charge of Gymnastics, U. S. Navy Pre-Flight School, Iowa City, Iowa

Formerly Director of the Division of Intramural and Recreational Sports at the University of Illinois

TOO great an emphasis cannot be placed on physical fitness as a national necessity if this country is to expect best results on both the home front and the fighting front.

Among the immediate physical needs are strength, endurance, power, agility, flexibility, and balance. The leader of recreation, then, aware of the present urgent trend, should encourage activities that stress strength and endurance for all groups of all ages and both sexes in the entire country. The rugged program should be encouraged by the wise leader who nevertheless safe-guards the participant by providing adequate equipment, e.g., gloves, shinguards, etc., in ice hockey. Intercollegiate and intramural sports should supplement each other. The less expert participant should be given full opportunity for competition in the intramural program. The service curriculum and the intramural program should be closely co-ordinated. Skills should be learned in the physical education program which the individual may use after school in the intramural program. Activities should be vigorous and competitive. The determined attitude to

(Continued on page 14)

The ATHLETIC JOURNAL

Nation-Wide Amateur Athletics

Vol. XXIII December, 1942 No. 4

Published by
THE ATHLETIC JOURNAL PUBLISHING CO.
6858 Glenwood Avenue
Chicago, Illinois

JOHN L. GRIFFITH, Editor

New Ways of Life

TWO statements which merit consideration and discussion have been made recently in the public press. The first one, by the Reverend Hugh O'Donnell, President of the University of Notre Dame, appeared in the Chicago Tribune, "Wake of the News". In that statement Father O'Donnell who, by the way, formerly played football at Notre Dame and who is a staunch believer in, and supporter of, the game, was quoted as saying: "This is a critical period for our country. Current trends indicate clearly that our national heritage is in danger. The growing octopus of statism is in the making and its tentacles are reaching out to capture those possessions which constitute the character of Christian civilization."

Another learned scholar some months ago, in talking to the editor remarked as follows: "When I was a boy I attended the public schools in Chicago. Some of my teachers were of one faith and others of another faith but all of them taught that all good things come from God." "Today", this university president said, "our children are being taught that all good things come from the state." He apparently was thinking along the same lines as was President O'Donnell when he wrote the splendid article referred to above.

The other statement that appeared in the papers was to the effect that the Yale Daily News in an editorial suggested that the university give up football because of transportation difficulties and military complications and because, as the editorial stated, "football does not fit in the new ways of living."

Perhaps the boys who wrote the editorial, referred to in the Yale student paper, were not thinking of the same things that President O'Donnell was thinking about, and the other university president referred to above, but no one will deny that a large number of our people are dreaming of a post-war Utopia in which someone will fight our battles and regulate our lives for us.

We are constrained to wonder how abandoning football at Yale would contribute to an improved standard of living. There are some of us who believe that football in its effect upon the people who watch, as well as those who play, is far more good than bad.

Keep Our Sports Going

FOR Wide-World Features, Mr. Frank Brutto recently reported that, with the probable exception of America, in no other country has sports taken such a hold on the people as in Germany. He also stated that the people in European countries were turning out as never before for European contests. This is interesting because there are those in this country who believe that it would help the United States win the war, if we were to call off all of our sports and games. We have called attention before to the fact that England practically abandoned her sports program but is now trying to revive it. From various sources we have learned that Germany has kept her sports going, in so far as possible, all through this war.

For some reason or other, the American people who like college football are very pronounced in their enthusiasm for the game. On the other hand, those who do not like football invariably are bitter toward the game and want to see it abandoned temporarily or abolished for good.

This is not intended as any reflection on the men who are at the head of ODT or on the men at the head of our armed forces. None of them, so far as we can learn, have indicated in any way that they felt that school and college games should be abandoned for the duration. The people generally who would like to see school and college athletics given up, not only for the duration, but for all time, are using the war situation as an excuse for their attacks aimed at athletics. We repeat, they are not men connected with the United States government.

Inside Not Outside Promotion of Sports

AT THE annual meeting of the Michigan High School Athletic Association in Lansing recently, Mr. L. L. Forsythe, President of that association for nearly a quarter of a century, made a statement which we are glad to pass on to the high school men of the country.

Mr. Forsythe pointed out that, if the high schools in any county, district or state were to give up high school basketball or other high school sports, outside organizations would gladly step in and promote tournaments for high school teams.

We may add that, if the high school men do not find ways of transporting teams within reason, we may expect that the representatives of other organizations, who would gladly have the honor of promoting athletics for the high school boys, will see that the teams are moved from place to place.

Christmas Greetings

from

THE ATHLETIC JOURNAL



THE ATHLETIC JOURNAL, each year, enjoys the privilege of wishing the coaches in the schools and colleges the best of the Holiday Season. This war-year we take especial delight in saluting the boys and men who have been a part of the school and college sport programs and in extending to them our heartiest good wishes. Specifically here are our hopes for a Merry Christmas and a Happy New Year.

To the boys and young men who, since the last war, have played on school and college teams and who, today, are in the nation's armed forces, may they return triumphant after having given the best that was in them.

To the coaches who, through the years, have been training young men to make the most of their heritage. The coaches have never asked their boys to believe that there was an easy way to success and these boys consequently, today, are grateful for the Spartan training they received, because it is helping many to stand up under the Spartan training they are now receiving.

To the principals and superintendents who taught their students that this was a great country and who helped these boys appreciate the honor that was theirs who served that country. The teachers who made it possible for their boys to engage in American games and to improve themselves in so doing.

While we wish all a joyous Christmas our thoughts especially are of those to whom we have referred. May they enjoy this Christmas and many more.

Suggested Routines for the School Gymnastic Program

(Continued from page 11)

win should be encouraged.

Gymnastics and tumbling are among the activities that may develop the desired qualities of strength, and endurance. An inspired and inspiring leader may offer a well-balanced, wisely guided program that may effectively influence the entire community in which he lives. The junior high school, the high school, the college, or the Y.M.C.A. may be the center from which may emanate a highly satisfactory and satisfying program of gymnastics and tumbling.

The good qualities of gymnastics and tumbling may be supplemented by additional big-muscle activities such as competitive outdoor sports, by mountain-climbing, by bicycling, by running, by brisk, correct walking, hiking, or swimming, all participated in with a view to physical improvement. The rugged, strenuous, vigorous, effort-requiring, energetic, strength and endurance producing program *must* be stressed; individuals must be imbued *now* with an appreciation for lifetime physical fitness which may be gained and maintained by purposeful participation in hardening activities. The results either good or bad, of the modern program of recreation may be judged to some extent by the condition of men who enter military service. Because of the demand for physically fit men, civilian programs should be co-ordinated as much as possible with service programs.

In the Naval Aviation program eleven departments have been set up at the Pre-Flight schools so that the cadet may be conditioned adequately for the work that is before him. These departments are as follows: football, basketball, baseball, military track, wrestling, boxing, swimming, soccer, hand-to-hand, gymnastics and tumbling, and mass exercises. Each department makes its particular contribution toward a well-developed, co-ordinated, self-disciplined, and self-confident potential naval aviator who will be able physi-

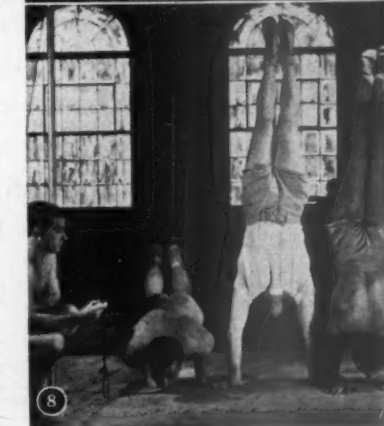
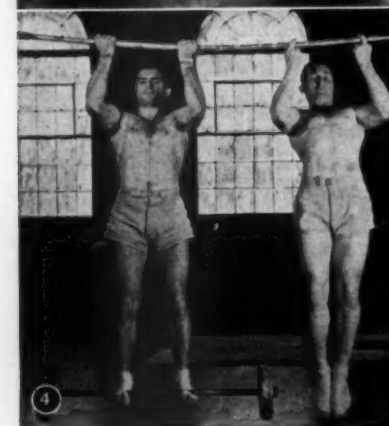
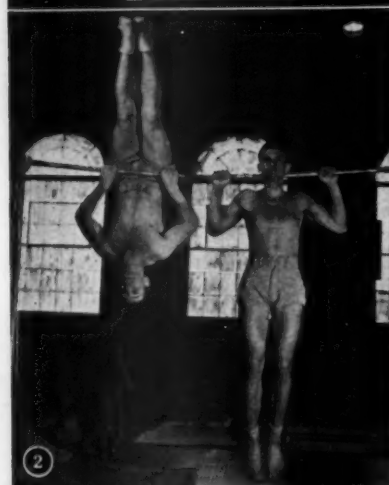


Illustration 1—Back lever.

Illustration 2—(Left) Belly grinds. (Right) Neck chins.

Illustration 3—(Left) Chins holding wrists. (Right) Chins holding biceps.

Illustration 4—(Left) Chins with 50-pound weight. (Right) Chins with one finger.

Illustration 5—Double rope climb.

Illustration 6—(Left) Skip forward and backward over leg. (Right) Wrist twists.

Illustration 7—(Left) Turn tables. (Right) Handbalance for time.

Illustration 8—(Left) Elbow lever for time. (Center) Handbalance for time. (Right) Forearm balance for time.

The Official Twins of the Majors



SPALDING

...the One and Only
Official Ball of the
National League



REACH

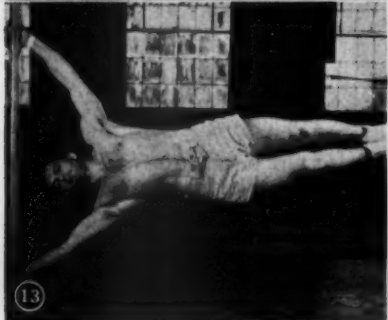
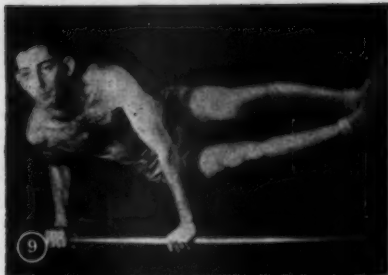
...the One and Only
Official Ball of the
American League



● The two great base balls used by the Major Leagues throughout the decades. Made of the finest materials by highly skilled craftsmen, both the SPALDING and the REACH are famous for unswerving service to the game's greatest teams. Choose either with confidence . . . Give your team a ball played by champions. Better order early. A. G. Spalding & Bros., Division of Spalding Sales Corp.

SPALDING SETS THE PACE IN SPORTS





cally, mentally, and emotionally to compete to advantage with the best that the enemy can put in the air.

Purposes of Competitive Developmental Gymnastics in the Sports Program

The endeavor has been made to co-ordinate closely both the regular departmental objectives* and the objectives of active, toughening competition in the Sports Program at the Iowa City Pre Flight School. The objectives then for the competitive developmental gymnastics program are:

1. To increase individual proficiency in strength, endurance, power, agility, balance, flexibility, and co-ordination.
2. To promote keen interest and individual accomplishment.
3. To promote teamwork based on individual effort.
4. To create a desire on the part of the cadet to participate in gymnastics and tumbling for improvement in his physical fitness.

Program Must Be Flexible

The outstanding characteristic of a well-functioning program is its flexibility. A frequently changing personnel such as that at the pre-flight school, necessarily demands a flexible program. The opportunity is given to a greater number of cadets to attain a higher level of skill than if the personnel did not change. If the same cadets were in the program for twelve weeks, the members would reach a much higher level of skill. But as it is set up now, the Sports Program administration could change its assignments weekly and the gymnastics staff could meet the situation with a minimum of confusion and without danger to the beginning gymnast. This situation is taken care of by setting up requirements for four squads, namely, Squads A, B, C, and D, with Squad A representing the most skilled of the participants, while Squad D represents the least skilled. In Squad D, the emphasis is placed upon strength for two important

* For Objectives of Gymnastics and Tumbling see page 10, September issue, *THE ATHLETIC JOURNAL* and Lieutenant Keeney's article, page 10, this issue.

- Illustration 9—Fence vault.
- Illustration 10—Swinging dips forward.
- Illustration 11—(Left) Dips with 50-pound weight. (Right) Lion's crawl.
- Illustration 12—Back press-ups with time checker present.
- Illustration 13—The flag.
- Illustration 14—(Left) "V" position for time. (Right) Half lever for time.
- Illustration 15—Push-ups. (Left) On fingers. (Center) With medicine ball. (Right) Ordinary push-ups.
- Illustration 16—(Left) Extension press for time. (Right) One-arm push-ups.
- Illustration 17—Leg lifts and sit-ups.
- Illustration 18—(Left) Crab push-ups. (Right) Right side support lifting left leg.



WILSON OFFICIAL LACELESS BASKETBALLS

Patented construction. No projecting laces. Smooth spherical surface. Correct balance. Faster, more accurate handling. Accurate bounces and rebounds. Steady beeline flight. Made of finest selected, top grade, pebbled cowhide. Rubber valve bladder. Model CTO, illustrated. Other "Laceless" models at slightly lower prices.



THE MARGIN OF VICTORY

by L. B. ICELY, President

That little margin of extra speed—extra dexterity—extra eye—extra stamina—is often the margin of victory in a tough basketball game.

And that same slight margin, translated to the field of battle—that margin of extra fitness for the job, often spells success, safety and a *citation* for the boy in uniform.

Yes, the boy who is fit—who hardens his body—develops his mind, his eye, his coordination—who learns to know the feeling of shock and pain—from competitive, body-contact games like our modern basketball—has a margin in fitness that gives him a better chance to do his job, and to come back.

American sports are an essential part of the training of our fighting forces. They are also important to the

physical fitness of the men in our production plants and on the home front. And basketball is one of the outstanding competitive, body-building sports for America's youth. Wilson Sporting Goods Co., Chicago, New York and other leading cities.

• NOW AVAILABLE!

Basketballs
Uniforms
Warm-up Apparel
Accessories of
All Kinds

WAR WORK AT WILSON'S

Crash helmets for tank crews; army cots and aviation kits; essential items of steel and wood—are being turned out for our troops by Wilson. At the same time we are supplying sports equipment to the limit of available material supplies, and will continue to do so.

IT'S WILSON TODAY IN
SPORTS EQUIPMENT

Wilson
BASKETBALL EQUIPMENT



Illustration 19—Monkey-walk relay.



Illustration 20—Horse-walk relay.



Illustration 21—Tripod relay.

reasons: 1. The average cadet has not had enough upper body development during his high school and college training. 2. Safety of the cadet is assured if he does not try gymnastics skills until he is reasonably strong in his biceps, triceps, and abdominals.

The requirements for Squads A, B, C, and D follow:*

Basic Requirements for Squad D

1. Eight chins
2. Ten dips
3. Skin the cat (3)
4. Two monkey hangs
5. Grasshopper walk—5 dips
6. Twenty push-ups
7. Two belly grinds
8. Climb the rope without legs
9. Headbalance.

High Bar

1. Ten chins
2. Skin the cat (3)
3. Two monkey hangs

Tumbling

1. Three low-front rolls
2. Three low-back rolls
3. Ten-second headstand

Parallel Bars

1. Ten dips
2. Grasshopper walk (5 dips)
3. Five swinging dips

All-Out Activities

1. Twenty-five push-ups
2. Fifty sit-ups
3. Half-lever (5 seconds)

Ropes

1. Nineteen-feet (legs and hands)
2. Nineteen-feet (hands only)
3. Double ropes, up and down

Balance Beam

1. Walk length and return, eyes open
2. Squat right, leg balance
3. Hop forward, one foot

Basic Requirements for Squad C

High Bar

1. Nine chins
2. Skin the cat (4)

*No attempt is made in this article to describe the gymnastic stunts listed in Squad groupings.

3. Monkey hang (3)
4. Belly grinds (3)

Parallels

1. Short underswing dismount
2. Press-ups (20) low parallels
3. Dips (12)
4. Hang walk (2)
5. Forward roll
6. Backward roll
7. Chest balance
8. Swing from shoulders
9. Front vault dismount over one bar

Tumbling

1. Eight-foot dive and roll
2. Headbalance
3. Headbalance, arms folded
4. Elbow balance
5. Series of three forward rolls
6. Series of three backward rolls
7. Series of three backward rolls, kip position
8. Snap down
9. Football shoulder roll, running start, land on feet, and continue run
10. Fall forward, squat through
11. Fall backward
12. Squat balance

Horse

1. From kneeling position, jump to stand on saddle, dismount with one-half turn
2. Straddle vault (about four feet)
3. Wolf vault
4. Thief vault
5. High front vault

Rings

1. Inverted hang—four pull-ups (hips level with rings)
2. Center beat (eight times)
3. Circle legs (right or left) (8 times)
4. Chin 4 times, legs in one-half lever

Basic Requirements for Squad B

High Bar

1. Twelve chins
2. Hip swing-up
3. Knee swing-up (single)
4. Double knee swing-up (outside of hands)
5. Double knee swing-up (between hands)
6. Single knee circle forward
7. Single knee circle backward

8. Hock swing, dismount
9. Knee swing up with one-half turn
10. Backward hip circle
11. Crotch circle

Tumbling

1. Headbalance, clap hands
2. Headbalance, hands behind head
3. Forearm balance
4. Backward roll, momentary handbalance and snap down
5. Nine-foot dive
6. High dive, chest high
7. Neck dive
8. Fish flop
9. Elbow lever
10. Series, handbalances and forward rolls
11. Handbalance to crab position
12. Round off
13. Cartwheel
14. Corkscrew
15. Bucking bronco

Parallel Bars

1. Butterfly (dip with one-half turn to support)
2. Dips (14)
3. Back uprise
4. Front uprise
5. Kick upstart
6. Swinging dips forward (12)
7. Swinging dips backward (12)
8. Cut legs over one bar
9. Flank vault dismount
10. Side dismount
11. Corkscrew mount
12. Lie between bars
13. Upper arm balance (swing from shoulders)
14. Shoulder balance
15. Shoot right heel along one bar, turn left to upper-arm hang
16. Over grasp, pull to support

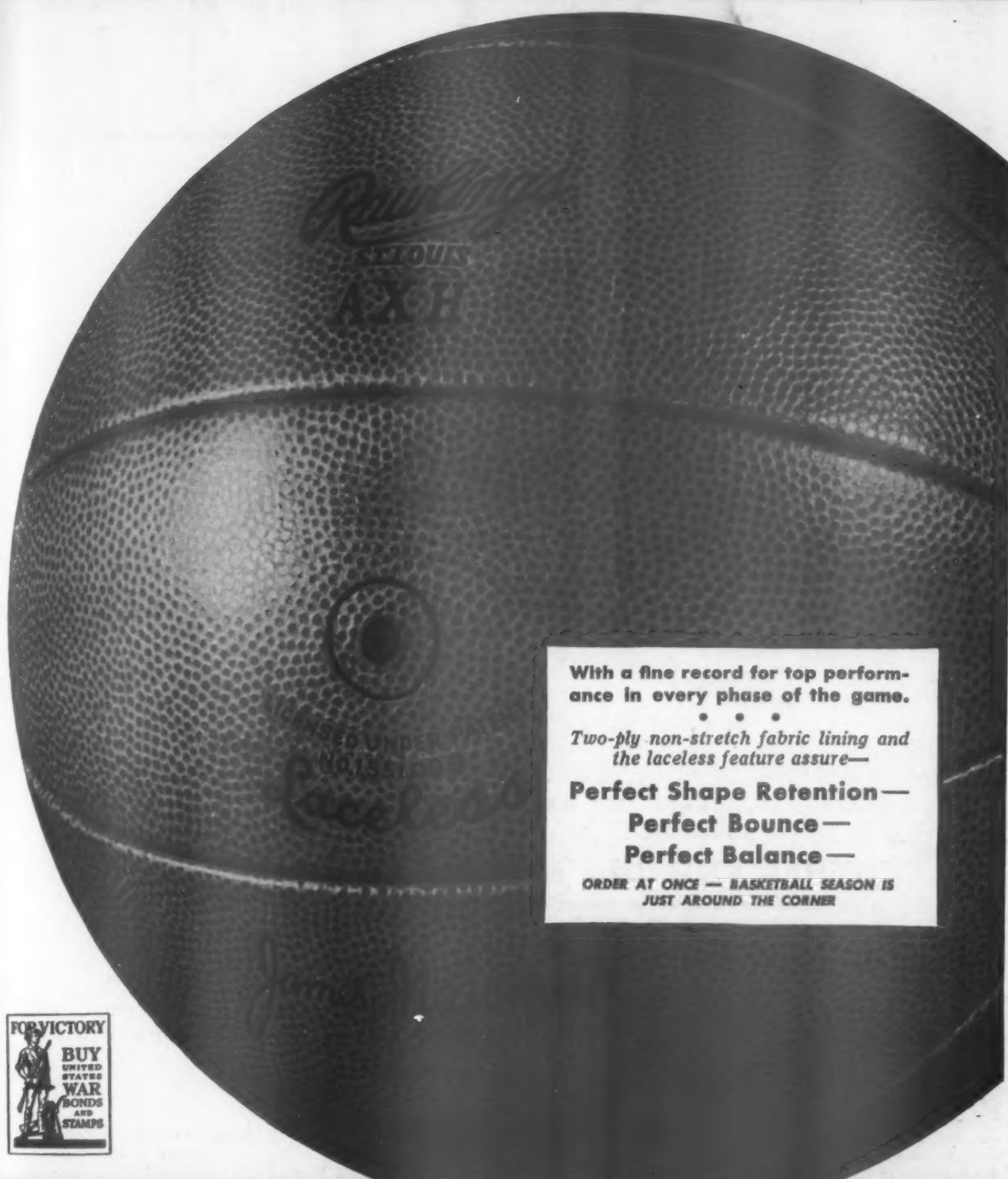
Rings

1. Nest hang (three times)
2. Chin eight times in one-half lever
3. Back dislocator (still rings)
4. Front cut-off (still rings)
5. Back cut-off (still rings)
6. Front dislocator (still rings)

Side Horse

1. Double rear dismount
2. Travel
3. Single leg circle
4. Neck spring

the **AXH** takes the **FIELD**



With a fine record for top performance in every phase of the game.

Two-ply non-stretch fabric lining and the laceless feature assure—

Perfect Shape Retention—

Perfect Bounce—

Perfect Balance—

ORDER AT ONCE — BASKETBALL SEASON IS JUST AROUND THE CORNER



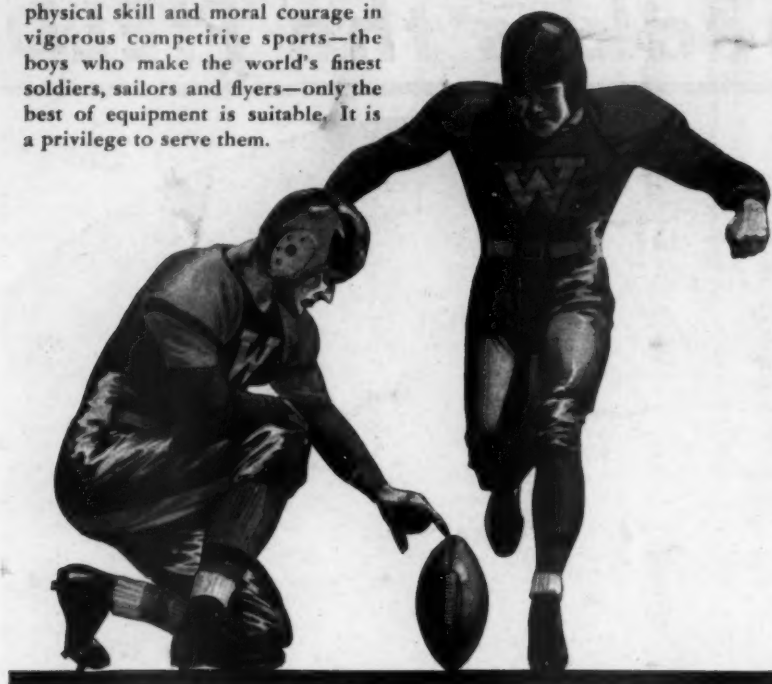
RAWLINGS MANUFACTURING CO.

ST. LOUIS

MISSOURI

IT PAYS TO PLAY

For the athletes of America, the boys who develop their muscles, their physical skill and moral courage in vigorous competitive sports—the boys who make the world's finest soldiers, sailors and flyers—only the best of equipment is suitable. It is a privilege to serve them.



O'Shea

ATHLETIC WEAR

FOOTBALL UNIFORMS

BASKETBALL UNIFORMS

AWARD SWEATERS

JACKETS AND WARM-UP APPAREL

O'SHEA KNITTING MILLS

1115 North Franklin Street • Chicago, Illinois

**DON'T LOSE PLAYERS
THRU FAULTY VISION!**

**Use SAFE-PLAY
BASKET BALL GLASSES**

Durable alloy frames, Safety lenses; just the answer for rugged play.

Coaches in every state in the nation attest their utility. Make up your mind now, to make use of every man.

WRITE TODAY for complete information.

SAFE-PLAY GOGGLE CO.
438 E. GRAND BELOIT, WIS.

Dr. D. T. Ryan
Optometrist

L. E. Means, Ath. Dir.
Beloit College

For Our Readers

who wish to save their Athletic Journals—Order our convenient container of special construction which will enable you to preserve your Journals in an orderly and convenient manner at a very low cost. These containers sell for exact cost or \$.30 apiece. Each will hold one year's copies.

Long Horse

1. Straddle over neck
2. Squat over neck

Basic Requirements for Squad A (Varsity)

High Bar

1. Fourteen chins or more
2. Pull to support, both hands leading
3. Double knee circle forward
4. Double knee circle backward
5. Kip (ordinary)
6. Kip (reverse)
7. Circus kip
8. Kip with one-half turn
9. Free hip circle backward
10. Forward hip circle
11. Back up-rise, ordinary grasp
12. Back up-rise, reverse grasp

Tumbling

1. Backward roll to headbalance
2. Handbalance
3. Handspring
4. Neckspring
5. Headspring
6. Handbalance, neck spring
7. Leaping handspring
8. Push-up to handbalance from headbalance
9. Press to handbalance
10. Rock to handbalance
11. Front somersault
12. Flip-flop
13. Back somersault
14. Round-off

Parallels

1. Twenty dips
2. Straddle forward over both bars
3. Straddle backward over both bars
4. Hollow back rolls
5. Back kip
6. Flying kip
7. Straddle both bars to cross rest
8. Glide kip
9. Drop kip
10. Kip up-start to upper-arm balance

Flying Rings

1. Back cut-off
2. Front cut-off
3. Front dislocator
4. Back dislocator
5. Three birds nests on swing (front end)

Side Horse

1. Single leg circles
2. Scissors (ordinary)
3. Scissors (reverse)
4. Single leg travel
5. Double rear vault

Long Horse

1. Squat vault over neck
2. Straddle vault over neck

Suggestions for Doubles (Squads A and B)

Balancing:

1. Shoulder, hand, knee balance
2. Low shoulder-to-shoulder balance
3. Low shoulder-to-shoulder, roll over, and return to shoulder balance
4. High shoulder-to-shoulder balance



ALL-AMERICANS ☆ AMERICANS-ALL

"All-Americans" on the Gridiron, outstanding in Performance and Achievement . . . "Americans-All" in every quarter of the globe, resourceful in Strategy, aggressive in Attack, determined in Defense. The Leadership, Teamwork, and Will-to-Win, instilled on the playfields of America, is proving its worth on the Land, in the Air and on the Sea.

It is equally essential that the workers on the home front be physically fit. Sports provide relaxation from physical and mental strain. Relax! Stay Fit with Sports!



Now Ready Progressive Basketball

CONTENTS

CHAPTER I Coaching Philosophies

CHAPTER II Coaching Methods

CHAPTER III Early Season Conditioning and Training

CHAPTER IV Offensive Fundamentals

Ball Handling	Fakes and Feints
Passing	Screens
Shooting	Body Balance
Footwork	Jumping

CHAPTER V The Dribble

CHAPTER VI Offensive Basketball

The Stanford Offense
Five Steps in Its Development
The Stanford Fast Break
Five Steps in Its Development
The Three-man Figure 8
Stanford Zone Offense
Offense for Pressing Defenses

CHAPTER VII Defensive Basketball

Individual Fundamentals
Fundamental Drills

CHAPTER VIII Team Defenses

Team Fundamentals
Assigned Man-to-Man Defense
Shifting Man-to-Man Defense
Zone Defense
Pressing Defense

CHAPTER IX Psychology and Strategy

CHAPTER X

The Basketball Season

A Daily Practice Schedule
Tournament Play
Scouting
Research

PRICE \$3.00—Write

EVERETT DEAN

Basketball Director, Stanford University
Stanford University, California

- Thigh stand
- Lock fingers, turn to back position, backward roll on partner's back
- Knee stand
- Practice shoulder mounts of all kinds
- Practice standing free on shoulders
- Practice walking with partner on shoulders
- Hand-to-heel shoulder mount
- Mount to stand on shoulders from lying position
- Backward jump shoulder mount
- Jump to low hand, foot balance
- Hand to hand grasp—shoulder, foot balance
- Mount to stand on shoulders, fall forward and forward rolls together
- Foot-to-foot balance and return to mat slowly
- Swan dive position on feet
- Front lever between legs
- Back lever (arms folded)
- Back lever (arms up)
- Handbalance on knees (lying down)
- Handbalance on knees, standing, throw over shoulder
- Stand on understander's head
- Low bent-arm hand-to-hand balance, then straight arm
- Kneeling bent-arm hand-to-hand balance
- Half-lever position above head
- High hand-to-hand balance
- Parrot balance on head
- Handbalance on belly
- Handbalance on feet
- Handbalance on neck
- One-arm lever on head

Relays

Relays play a very important part in the intramural gymnastics and tumbling program here at the Iowa Pre-Flight School. The following are of the strength type:

Monkey Walk (Illustration 19)—Cadet A stands with legs spread; Cadet B lies on his back between A's legs, facing the same direction; Cadet A bends forward, placing his hands on the deck; Cadet B places his legs around A's waist, reaches upward and holds on to A's buttocks. A moves forward carrying B.

Horse Walk (Illustration 20)—Cadet A bends forward, placing his hands on the deck; Cadet B lies on A's back, facing the opposite direction.

Tripod (Illustration 21)—Cadet A stands erect; Cadet B stands in front of A, facing the same direction, places his hands on the deck, raises his legs, and places his feet beneath A's arms; Cadet C stands with his back to A and assumes same position as B; A moves forward holding B's and C's legs firmly under his arms.

Chair Obstacle Relay—Two chairs (seats facing each other) with a separation of two feet between are used. Between the chairs a wand is placed on top

of the seats, thus forming a hurdle. Cadets run down, crawl beneath the wand, and run back, hurdling the wand. Variations may be used, for example, a wheelbarrow race in which cadet must hand-walk over the obstacle.

Chariot Race (2, 4, 6, 8 cadets)—Men run together, arms locked, around distant object.

Elephant Walk—Cadet A stands erect, with legs spread; Cadet B faces A, jumps upward and places his legs around A's waist, bends backward and places his arms on the deck between A's legs; Cadet A bends forward and places his hands on the deck; Cadet B places his hands on A's ankles and straightens his arms; Cadet A moves forward.

Crab Crawl—Cadet A lies on his back, raises his body off the mat to the crab position (supported on hands and feet), and crawls forward or backward.

Horse and Rider—Cadet A stands erect; Cadet B mounts on A's back, feet and legs around A's waist, hands clasped over A's shoulders; Cadet A carries B to a designated object, changes partners and returns.

Human Chair—Cadet A bends slightly forward, placing his right hand between his legs; Cadet B stands back of A, bends forward and grasps A's right hand with his right hand. Cadets must keep hands grasped.

Inverted Hang (Cadets A and B)—Cadet A stands erect; Cadet B faces A, bends forward, placing his hands on A's feet, and does a handstand; Cadet A grasps the ankles of B as he makes a handstand. On signal, A and B move forward.

Mat Relay—Where gymnasium mats or pads are handy, these relays afford a great deal of fun. First cadet turns and runs to the mat, does a forward roll, and continues to the end of the room and back. Different tumbling stunts with wide variations may be used.

Medicine Ball (9)—Cadet A bends forward placing his hands on the deck, with his body somewhat extended. A must butt medicine ball, with his head down, to a designated object, pick up the ball and run back.

Skin the Cat (6 or more)—Cadets line up in single file or squad, facing same direction. Cadet bends forward placing his right hand between his legs, grasping the left hand of the cadet behind him. Cadet reaches forward with his left hand and takes his right hand from the man in front. On a given signal, the last man in the column lies down, keeping his body straight, and his feet together. All cadets move backward, doing the same. When the first man gets over all, he holds on and returns to his original position.

Stroke the Boat (2 or more)—Cadets sit on the deck, directly behind one another, placing their feet in one another's lap. The cadet in the fore part of the boat can use his feet, hands, and buttocks,

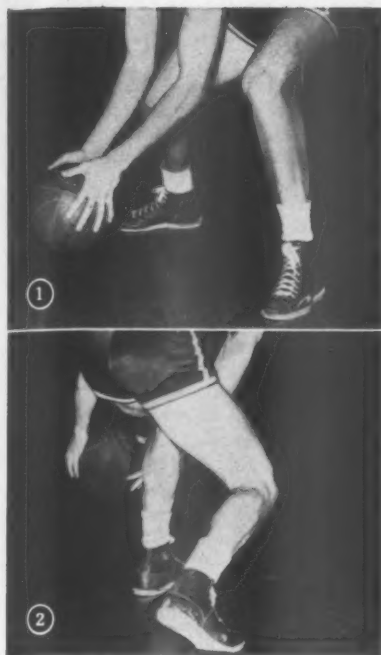


Illustration 1 shows a player making a stride-stop with the left foot forward, knees bent and hips down. The ball is protected.

Illustration 2 shows a player making a pivot away from the defensive player. He has shifted his weight to the pivot foot (the right) and pushed off with his left foot. He is now in position to pass.

Illustration 3 shows a player making a jump stop. Both feet are on line, the knees are bent and the hips are down. The ball is protected.

Illustration 4 shows a player in the act of pivoting away from the guard. The left foot is the pivot foot. The weight has been shifted to the pivot foot.

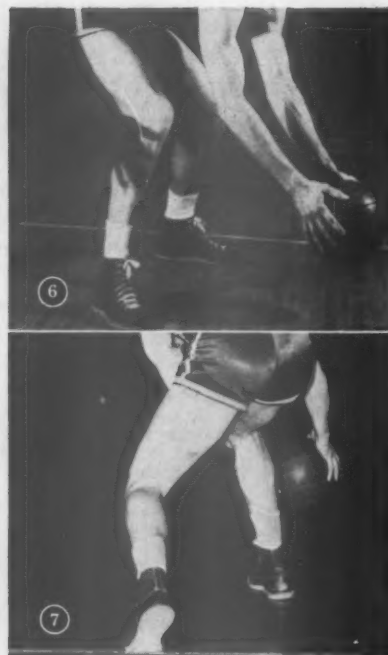


Illustration 5 shows a completed turn. The knees are still bent, the hips are down and the ball is protected. The player now can pass the ball to a team mate.

Illustration 6 shows the player executing a stop along the left side line. He has stopped in stride with his right foot forward, his knees bent, his hips down with the ball out, and away from the defensive player.

Illustration 7 shows a player turning and pivoting away from the defensive man. His weight has been shifted to the left foot and he has pushed off with his right foot. Distance has been gained away from the defensive man in this way. The player is now in position to pass back to a team mate.

Basketball Play (Series 3)

Good Basketball Play Demands Good Footwork... Good Footwork Requires Good Shoes

The third of a series of illustrated short talks on Footwork in the various sports. The illustrations and captions are prepared by specialists.

The Basketball Series continues in the January issue. Reprints of all series may be secured at the address below.

Whether you want information on Footwork or Shoes, consult the House of Quality and Service

JOHN T. RIDDELL, INC.
1259 N. WOOD STREET CHICAGO, ILLINOIS

Comments on Progressive Basketball

By Branch McCracken

Basketball Coach, Indiana University

Progressive Basketball is the latest basketball book out and should have a place in every coach's library. The author, Everett S. Dean, Director of Basketball at Stanford University, has concentrated on his own philosophy of coaching and coaching system in order to give a more detailed discussion of the most essential phases of the game.

I believe every basketball coach would profit by reading Chapter One, *Coaching Philosophies*. The philosophies of nineteen well-known coaches are given to the reader, as well as the philosophy of the author. More information and discussion on this subject are presented in this chapter than in any other athletic book, to my knowledge. This chapter stresses the importance of every coach having a clear and definite philosophy of coaching in order to fit into the educational picture. This chapter emphasizes "essential things first." I was particularly impressed with the beliefs and principles of all the coaches in their philosophies.

The second chapter, *Coaching Methods*, is a fine dissertation on coaching and teaching rules, giving much consideration to the laws of learning. Detailed rules on how to coach fundamentals will be helpful to coaches. The largest number of psychological and physiological basketball tests ever presented in one book appear in this chapter. Many of these are unique, yet very practical, as teaching aids. Charts, graphs, and statistics are presented as motivating devices for teaching.

The chapter on *Offensive Fundamentals* is profusely illustrated with form pictures and diagrams of fundamental drills. Lengthy discussions on ball-handling, passing, shooting, footwork, fakes and feints, screens, body balance and jumping, accompanied with pictures and diagrams, make an instructive chapter.

The Stanford offense is illustrated with pictures and diagrams in Chapter Six. The five steps in the development of the Stanford offense show clearly its progressive stages. The author has broken down the fast break offense into parts which have been used in progressive steps in its development. Other offenses diagramed and explained are the three-man figure 8, the zone offense, and an offense for a pressing defense. These offenses appear to be very sound in their construction and suitable to the college and high school teams.

The two chapters on defense cover both individual and team fundamentals and drills. Coach Dean discusses defensive strategy and shows why he believes in a variety of defenses. This chapter brings out his belief in a proper balance between offense and defense and the importance of defense as a stabilizing influence.

Chapter Nine is a discussion of offensive and defensive strategy.

In the final chapter you will find a daily practice schedule which has been lifted from the Stanford daily practice book. This schedule shows the amount of time allotted to fundamentals, team organization, and scrimmage.

while other cadets will be limited to hands and buttocks. That team, whose cadets separate, is the loser.

Tandem Walk—(Cadets A and B)—Cadet A bends forward, placing his hands on the deck, his fingers well spread; Cadet B stands in front of A, facing the same direction, bends forward, placing his hands on the deck, fingers well spread, feet raised upward and placed on A's shoulder. On signal, both walk forward.

Tug of War—Using a one and one-half inch line, fifty feet long, twelve men or more on a team, pull for two minutes.

Three-Man Wheelbarrow—Cadets A, B, and C stand directly behind one another, facing the same direction. Cadet A bends forward, placing his hands on the deck. B places his hands on A's buttocks while C stands and holds B's feet and legs extended.

Back Carry—Cadets A and B stand back to back and lock arms. A bends forward, lifting B up on his back; B bends at the waist raising his legs upward.

Two-Man Carry—Cadets A, B, and C, stand directly behind one another, facing the same direction; Cadet A stands erect; Cadet B stands behind A, jumps upward and places his legs around A's waist, his arms around A's shoulders, his legs straight; Cadet C standing in front of A sits on B's legs; Cadet A walks forward carrying B and C.

Pilot Hang (Cadets A and B)—Cadet A lies on the deck, facing upward; Cadet B straddles A, legs spread, and bends forward, placing his hands on the deck, facing

A; Cadet B places his legs around A's waist and holds on to A's neck, then moves forward carrying B.

Dead-Man Carry (A, B and C)—Cadet B lies on the deck, keeping his body rigid; Cadets A and C grasp B beneath the neck and by the ankles, and continue to carry B in a rigid state.

Bar Walk (A, B and C)—Cadets A, B and C stand side by side, facing the same direction; Cadets A and C flex inside arms, forearm parallel to the deck, outside arms flexed and held across the body grasping the inside arm. Cadet B grasps the wrists of A and C and lifts his body upward, his feet approximately four to six inches off the deck. Cadets A and C move forward carrying B.

Pass and Duck (4 or more cadets)—Cadet A stands three feet in front of a column, composed of three or more cadets, facing the column. Cadet A passes a medicine ball to cadet B who returns the pass, then squats. A passes to C who does as B did, and so on down the column. When the ball gets to the end of the column, the cadet carries it to the position of A and then A steps in front of the column and the relay continues.

The author wishes to acknowledge the assistance of Lieutenant James Tysor, Lieutenant (j.g.) Elwood Pitzer, Lieutenant (j.g.) Thomas Bukvich and Ensign Newton Loken in the preparation of this article.

Illustrations in the two gymnastic articles are "Official Navy Pictures."

A Change of Pace in Basketball

By Cecil P. May

Basketball Coach, East High School, Aurora, Illinois

THE principle of unexpectedness in a change of pace is a recognized essential of a successful play in all sports.

A change of pace will adapt itself to all types of offense and defense. An offense that is pressing for speed will very likely use it less as an effective weapon, because it is difficult to take advantage of a change of pace when speed is primarily emphasized. An offense using a slow break will, through necessity, use it much more often. An offense that emphasizes and points out the details in the use of the change of pace will reap the benefits of a fast break and a slow break offense—the use of the two extremes is the most profitable road to follow.

Some of the earmarks of a good change of pace on offense are the following situations:

1. *Patience* to wait when handling the ball, especially in the short areas around the basket, until a decided advantage develops for a decisive pass or an unmo-lested shot.

2. *Deceptive Fakes* in the set-up areas before attempted shots or passes. In recovering the ball offensively, it is best, as a general rule, to realistically *Fake* to pass before actually making a bona fide attempt.

3. *Pass Down* to team mate when opponent is pressing on an attempted lay-up shot.

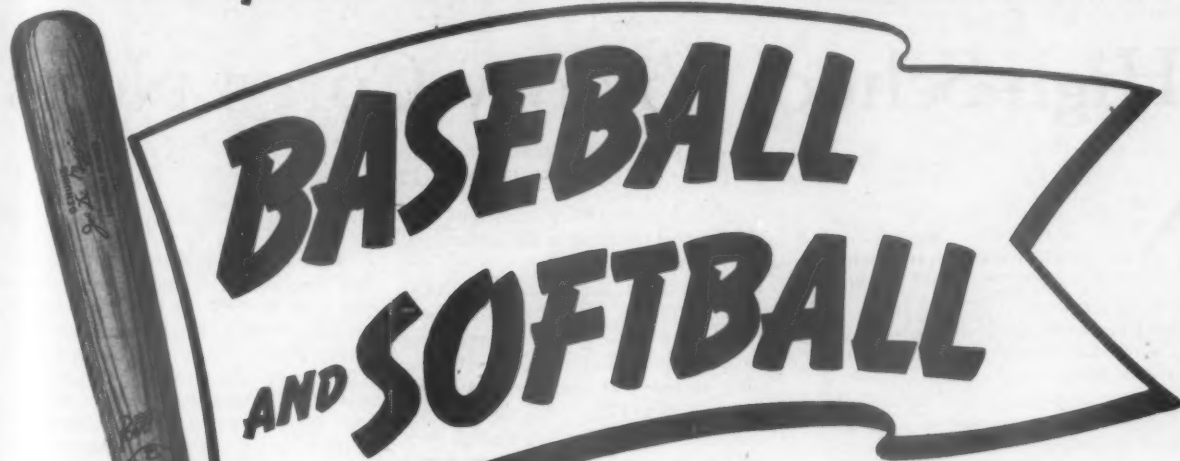
4. *Point* your action away from your team mate, who is in a vulnerable position for a set-up, when you are handling the ball—then, unexpectedly pass to him for a lay-up.

5. *Going In* on an individual drive for a set-up, *Stop-Fake*—before attempting a lay-up shot, otherwise the defense will press and interfere with the attempted shot.

6. *To Dribble Fast*, then unexpectedly slow up as if to stop, break fast forward at full speed for a decided advantage.

7. *To Slow* the defense down and get them flat-footed—use deliberate play—no hurry or anxious play—from a flat-footed position, use deceptive passes to receivers

Place your order - *NOW!* for your LOUISVILLE SLUGGER BATS



Our government has strongly urged participation in organized competitive play, therefore a full line of Louisville Slugger bats will be available for your Baseball and Softball teams in 1943. Don't delay in placing your orders NOW, however, due to possible further curtailment of shipping facilities later on.

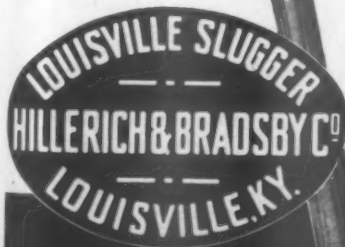
Louisville Sluggers are available in Special Autographed Models designed for Prep School and College baseball players in addition to the regular Louisville Slugger line, which includes a wide variety of types, styles, weights and lengths priced to meet your requirements.

THESE SPECIAL SCHOLASTIC MODELS ARE READY NOW!

Joe DiMaggio Special
Jimmie Foxx Special
Lou Gehrig Special
Joe Gordon Special

Ducky Medwick Special
Mel Ott Special
Babe Ruth Special
Ted Williams Special

Your sporting goods supplier is ready and will be glad to discuss your needs. Remember, good equipment inspires confidence—so important to successful play.



HILLERICH & BRADSBY COMPANY, Inc.
LOUISVILLE, KENTUCKY

ALSO MAKERS OF LOUISVILLE POWER-BILT, LOUISVILLE GRAND SLAM & LOUISVILLE LO-SKORE GOLF CLUBS

inside, and quick, unexpected cuts for the basket.

8. *To Break Fast* on a dribble, when the ball is quickly recovered on a misplay and the opposition is outnumbered, as you drive down the floor.

9. *Fake to drive* in immediately after passing inside—two or three quick strides—*Stop*—*Slide* back for a quick position shot.

10. *Pass inside*—*Relax*—*wait* (for a 1 or 2 count), then cut fast in toward the basket.

11. *Pass In to the Post*—drive fast to go to the left—*Stop Suddenly*—Change directions—go to the right of the ball handler. In so doing, the post will screen off the opponent.

12. *Use a Delayed type* of defense; fall back to the short shot area; on a time-out use a forcing or a pressing defense all over the floor.

In summarizing the essence of a change of pace on offense, it makes for versatility in individual performance, as well as team success. To attain the greatest perfec-

tion, it requires individual techniques rather than team unity. It depends upon the individual carrying the ball just as far as it is aggressively possible, just so long as the carrier does not jeopardize the loss of the ball. The individual must have the patience to wait under pressure and to give ground slowly, to advance the ball in closer, regardless of the "storm" of players in the short-shot area, to remain cool and to use realistic passing and shooting fakes and to wait for the opportunity of advantage!

High-School Victory Corps News

By A. L. Threlkeld

National Director, High-School Victory Corps

NEWs of activities that Victory Corps members are already engaging in has begun to reach us. Imagination, variety, and a will to win are demonstrated in all of them.

Students in all the high schools in the State of Washington joined the Victory Corps in simultaneous ceremonies held on the very appropriate date of December 7.

Victory Corps members in East High School in Denver, Colorado, take courses in machine tool operation, welding, radio, and automobile maintenance after regular school hours.

The science department at Miami, Florida, Edison Senior High School, a Victory Corps school, has begun to teach members how to combat and treat the effects of common warfare gases, and construct and

extinguish incendiaries. A course in healthful meal planning in the face of food shortages is also offered.

Highland Park High School, in Highland Park, Illinois, had a War Aid Committee before plans for a Victory Corps were announced. To keep in step with the Nation, the student council voted to organize a Victory Corps with the War Aid Committee as a nucleus. A central committee, made up of twelve students and a few faculty advisors, was appointed to propose projects, take care of publicity, encourage participation, and develop Victory Corps policy. A committee of eight considers membership applications and keeps membership lists. A Victory Corps director in each home room serves the

class in much the same way the central committee serves the school.

Highland Park takes great pride in General Jonathan Wainwright, an alumnus of the class of 1901, and in his honor has established the General Wainwright Scholarship Fund. All money collected by the Victory Corps—through salvage drives and such—is turned into war bonds. The first Wainwright scholarship will be granted in ten years, when the first bond matures.

Some activities which may be credited toward membership in the Highland Park Victory Corps are war-bond selling, victory gardening, food preserving, helping a farmer (with or without pay), scrap salvage, holding a job that releases an adult for war work.

The Swimming Program at Tulsa

(Continued from page 6)

classes where there is a noticeable difference of ability among the boys, two groups are formed classified as "A" and "B" groups and slightly different work is assigned. Much of the elementary work is handled in the shallow end of the pool, which is of standard size, 60x20 feet. As the boys become more proficient with the exercise they are then sent down the length of the pool in groups of fours, each boy occupying a lane. Boys who have colds, open sores and other skin infections are not permitted to swim, but must remain in an enclosure in the pool so they can hear the explanations and see the demonstrations.

The work of the second nine-week period is probably the most intensive and interesting. It is in this period that we take the sophomores fresh from the toughening nine weeks of beginning gymnastics and calisthenics. These are the boys who are the real sinkers, with a sprinkling of beginners. The sinker is a boy who cannot swim, practically speaking, one that cannot get across the length of the pool. If he can swim the entire length of the pool (sixty feet) he is given

the beginners' test in which he jumps into the deep end feet first, levels off, swims down the center of the pool for twenty-five feet, turns around and swims back again. The boys then can begin taking the swimmers' tests which are prescribed in the *American Red Cross Manual for Examiners of Junior and Senior Life Saving Tests*. After the boys have passed the swimmers' tests and have swum a quarter mile (twenty-three lengths of the pool) and have had eight hours of instruction in the various life saving tests they are qualified to take the junior or senior Red Cross tests the following first nine weeks of the second semester.

This nine-week period of intensive instruction for sinkers, beginners and swimmers is divided as follows. The first two weeks are spent on the crawl stroke, which is broken down into, first, the coast across the pool, followed by adding the flutter kick, the student coasting across, face down and holding his breath. Then the mechanics of the alternate double overarm are taken up separately. The breathing is taught in various ways, the best method being to have the student

hook his feet into the trough, and using the alternate double overarm, turn his head for breathing. Then the student is given the mechanics of combining the kick with that of the double overarm, using the six-beat kick, three kicks to each arm pull. After this exercise has developed the student in crossing the pool easily, the breathing is added and the student sent down the pool combining the three elements of the crawl; that is, the flutter kick, the arms and the breathing. Corrections are made as to position of the head, roll of shoulders and body, and kick of the feet.

The inverted crawl or back stroke is then taken up the next two weeks, the stroke broken down and taught piecemeal, put together finally and the student sent down the pool when he gets the proper co-ordinations. The third two weeks are given over to the learning of the breast stroke in the same manner. Each week of instruction, students are given instruction in fancy diving, starting with the front dive, mechanics of making the approach, take-off, position in the air and entry into the water. The back dive is



YOU know that Basketball Keds help your team play a faster, better game. But there are no new Basketball Keds. We are making rubber-soled, fabric shoes for our armed forces only.

If your team is to have the advantage of Keds, it's up to you and your squad to make the Keds you now have last longer. Follow these simple suggestions for extra games in Basketball Keds.

WASH KEDS FREQUENTLY The acids of perspiration shorten the life of Keds. Wear Basketball Keds right into the shower at regular frequent intervals and give them a good scrubbing. At the end of the season all Keds should be thoroughly laundered and stored in a cool dark place until the following season.

KEEP KEDS AWAY FROM HEAT AND SUNLIGHT Don't put Keds in lockers near hot pipes or radiators. After washing, be sure that they are

not dried in what seems the quick easy way—on a radiator. They'll wear longer if they are dried slowly at normal room temperature. Don't leave them on window sills or on locker room benches where direct sunlight will fall on them. Both heat and light speed up the oxidation of rubber.

KEEP KEDS AWAY FROM OIL AND GREASE Don't wear Keds out of the gym where there is apt to be oil or grease.

REPAIR ALL BROKEN STITCHES PROMPTLY One broken stitch may lead to the complete disintegration of the uppers of your Keds.

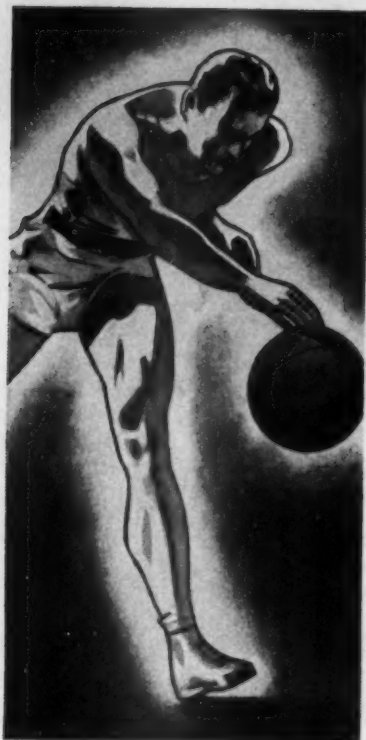
KEDS FOR NEXT SEASON Don't throw away a single pair that has any wear left. Any Keds that are too far gone for wear next season will be welcome at your local salvage station.

REG. U. S. PAT. OFF.
Keds



UNITED STATES RUBBER COMPANY

ROCKEFELLER CENTER • NEW YORK



● Intelligence, courage and will-to-win are seriously impaired unless backed up by a perfectly conditioned and trained body. That is why America's vigorous competitive games play such an important part in the training of our fighting forces. They produce finely muscled bodies that operate like machines, directed by smart minds and backed by courageous hearts. We are proud to play a part in equipping America's athletes.

KING

Sportswear

ATHLETIC JERSEYS • SWEATERS • SHIRTS • HOSE

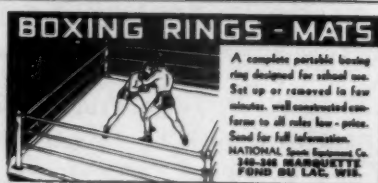
KING SPORTSWEAR CO.

1115 N. Franklin Street, Chicago



Send for our catalog on the Nation's outstanding line of Gym Mats, Wrestling Mats and Football Dummies.

PETERSEN & COMPANY
5561 BAYNTON STREET PHILA. PA.



then taught and then the front and back-jackknife dives are added to the list. Throughout these first six weeks such exercises as racing dives, surface dives, swimming on the back without hands, using frog or reverse scissors kick, swimming on side with upper hand out of the water or placed on the hips, using the scissors kick, treading water, bobbing up and down for breathing development are given. As each stroke is mastered, the better swimmers are given a one-length time trial which creates ambition to swim better and faster.

The final three weeks of this period are then given over to review and practicing the various life saving tests.

The intramural swimming meets are patterned after the interscholastic program of events. Each class has a team and meets the four other classes once. A regulation program is run off in the pool with regular officials acting as starters, judges and timers, scorer, announcers, and clerks of course. Each student is limited to two events and one relay or two relays and one event. The events are the 40-yard, 60-yard, and 100-yard free style events; the 60-yard back stroke; the 60-yard breast stroke; fancy diving (two required and two optional dives); the 120-yard medley relay, the 160-yard free style relay, and the 60-yard individual medley race. This race is added for those boys proficient in all three strokes and is quite popular with them. Intramural contests in water polo and water basketball used to be contested also. In the final nine-week session in the spring, intramural relays are conducted which are very interesting and fascinating to the boys. These are the so-called 80-yard and 160-yard free style (four men); the 160-yard back stroke (four men); the 160-yard breast stroke relays (four men); and the 180-yard medley relay (three men).

The interscholastic competition is carried on with a group of about thirty-six candidates who train practically the year around. Intensive training, however, starts with the close of the football season, Thanksgiving Day, and continues until March, when the state meet is held. The boys train daily during what is called the sixth period and continue after the close of school about a half hour. The training of the swimmers for interscholastic competition depends a good deal on the coach, the type of swimmer, the competition and facilities and time for training. Different coaches have different systems and all are fairly successful, depending pretty much on the material they have to work with. A high school adolescent cannot be hurried along as his heart lags in the period of bodily development, but careful training will develop this most important organ to the point where it can care for the bodily needs of a competitive swimmer.

HOTEL SHERMAN

ATHLETIC HEADQUARTERS IN CHICAGO

PLEASE NOTE

- **EVERY MONDAY**
JUNIOR ASSOCIATION OF COMMERCE
- **EVERY TUESDAY**
ROTARY CLUB LUNCHEON
- **EVERY WEDNESDAY**
SHRINERS' LUNCHEON CLUB
- **EVERY THURSDAY**
CENTRAL LIONS LUNCHEON
KIWANIS CLUB LUNCHEON
- **EVERY FRIDAY**
EXECUTIVES' CLUB LUNCHEON

1700 ROOMS

1700 BATHS

from \$2⁷⁵

- Ideal headquarters for your teams, whenever they come to Chicago.
- Exceptionally comfortable beds with extra long sizes specially for big men.
- Special "training menus" gladly arranged.
- Convenient to all transportation and places of amusement.
- Home of the College Inn, featuring, always, a nationally famous orchestra.

CLARK • LAKE • RANDOLPH AND LA SALLE STREETS

C · H · I · C · A · G · O

Requirements for High-School Victory Corps

BECAUSE of the many requests for additional information regarding the High-School Victory Corps which have been received at the office of this publication, the requirements for general membership and for the five special divisions are reprinted. The insignia (exact size and color) are shown on cover 3.

The Victory Corps bulletins have been distributed by the United States Department of Education to the principals of all secondary schools, to state superintendents, and to city, county and diocesan superintendents. Additional copies of these bulletins may be secured by writing to the Department of Documents, Washington, D. C. The price per copy is fifteen cents.

Since one of the electives in the special divisions of the Victory Corps is a program of military drill, information has been sought by high school administrators on inaugurating drill in their schools. The official Infantry Drill Manual is, of course, the most authoritative source for this program. A copy of the manual may be secured from the Superintendent of Documents at a cost of thirty cents.

Students should not write us for insignia. They must file applications for membership in all divisions with the principal of the high school, or the person designated by him to organize the Victory Corps. (For application blank see page 6, October issue.)

Coaches are expected to take an important part in the organization of Victory Corps, since participation in physical fitness programs is required in all divisions.

General Membership

1. The student should be participating in a school physical fitness program appropriate to his abilities and needs in the light of his probable contribution to the Nation's war effort.

2. The student should be studying or have studied school courses appropriate to his age, grade, ability, and probable immediate and future usefulness to the Nation's war effort, within the limits of the facilities of the school.

3. The student should be currently participating in at least one important continuing or recurring wartime activity or service of the types indicated in the suggestive list of Victory Corps service activities: 1. Air warden, fire-watcher, or other civilian defense activity; 2. U. S. O. volunteer activities; 3. Red Cross services; 4. Scale model airplane building; 5. Participation in health services, such as malaria control; 6. Farm aid, or other part-time employment to meet man-power shortages; 7. School-home-community services, such as salvage campaigns, care of small children of working mothers, gardening, book collection.

Production Service Division

a. Must have pursued or be pursuing a program which includes courses which are definitely pointed to preparation for work in the field of agriculture.

b. Must have pursued or be pursuing a program which includes courses which are definitely pointed to preparation for work in the field of trades and industry.

*c. Must be participating in a physical fitness program.

d. Must have engaged or be engaging in part-time work, either paid or voluntary, in some form of production.

e. Must be participating in a program of military drill. (c) required, select two others.

Air Service Division

a. Must have pursued or be pursuing a program which includes one year of high-school physics and three years of high-school mathematics.

b. Must have pursued or be pursuing a course in pre-flight aeronautics.

c. Must have pursued or be pursuing a course in automotive mechanics, radio, electricity or a vocational shop course which gives preliminary preparation for the servicing, maintenance or repair of aircraft.

*d. Must be participating in a program of physical fitness.

e. Must be participating in a program of military drill. (d) required, select two others.

Community Service Division

a. Must have pursued or be pursuing a program which includes courses definitely pointed to preparation for service occupations at the professional level.

b. Must have pursued or be pursuing a program which includes courses definitely pointed to preparation for commercial, distributive, homemaking or similar community service occupations to be entered upon leaving high school.

c. Must be engaging in some form of part-time work, either paid or voluntary, in some form of community service.

*d. Must be participating in a program of physical fitness. (Required)

e. Must be participating in a program of military drill.

Sea Service Division

*a. Must have pursued or be pursuing a program which includes courses in high-school mathematics, preferably through plane trigonometry.

b. Must have pursued or be pursuing a program which includes at least one year of high-school laboratory science, preferably elementary physics.

*c. Must be participating in a program of physical fitness.

d. Must have pursued or be pursuing a course in the elements of navigation.

e. Must have pursued or be pursuing one or more shop courses.

f. Must be participating in a program of military drill. (a) and (c) required, select one other.

Land Service Division

*a. Must have pursued or be pursuing a program which includes at least one year of high-school mathematics, or its equivalent in shop mathematics.

b. Must have pursued or be pursuing a program which includes at least one year of high-school laboratory science or its equivalent in shop science.

*c. Must be participating in a program of physical fitness.

d. Must have pursued or be pursuing a program which includes one or more special preinduction courses.

e. Must have pursued or be pursuing a program which includes one or more shop courses.

f. Must be participating in a program of military drill. (a) and (c) required, select one other.

TRAINERS JOURNAL

SECTION

The NATIONAL ATHLETIC TRAINERS ASSOCIATION

DECEMBER, 1942

No. 4

Official Publication
Of the National Athletic
Trainers Association

Mass Exercise
Lieutenant M. J. Gary

Elbow Injuries
Roland Bevan



Dr. Wilbur Bohm supervising the
work of Bob Sheridan and Scott
Witt, two student trainers. A
Gibney boot is being applied.

THE TRAINERS JOURNAL SECTION

Official Publication National Athletic Trainers Association

December, 1942

No. 4

Officers National Athletic Trainers Association
For 1942-1943

President, Dr. Wilbur Bohm, Washington State College
1st Vice-President, Lieutenant Roland Logan, North Carolina Navy
Pre-Flight School
2nd Vice-President, Tucker Smith, Ohio State University
3rd Vice-President, Percy Quinlan, University of North Carolina
Executive Secretary and Editor of Trainers Journal, Bill Frey
Office of Publication, Iowa City, Iowa

A Word from the 1942-43 President of the National Athletic Trainers Association

THE National Athletic Trainers Association has accomplished a great deal since its inception, and much credit is due its members.

A vital responsibility rests upon the shoulders of those responsible for the training and conditioning of the athlete today. The immediate care of the injured is essential in the effective treatment of the injury. The future happiness, well-being and serviceability of the athlete depends upon the ability of the trainer in his work, in the prevention and treatment of injuries.

The national defense preparedness program has given a new significance to our organization. The training of our young people in the all-important field of physical fitness is adding additional responsibility to those who are responsible for the physical condition of the young people in our schools and in the service of their country.

Physical fitness is being stressed more and more each day. Heretofore, we have been concerned chiefly with the young people in our schools and colleges. Today, many of our group are carrying on with their work and rendering splendid service to the armed forces and playing a leading role in the development and maintenance of their physical fitness. Your membership in the association is a verification of your experience in dealing with the prevention and treatment of injuries, as well as in other phases of conditioning and has, no doubt, aided our members who are now in the service in being able to carry on in the work for which they are especially well fitted.

If you have devised new ways of doing things that have helped you in your field, do not hoard them jealously, but let us all have the advantage. Again, if you have carried on some research work, make it more valuable by publishing it, and thus make a

contribution to the profession. The Trainers Journal provides a means for you to pass this on to the fellow members. It is the mouthpiece of our association.

In conclusion, I want to take advantage of this opportunity to appeal to you for your wholehearted support.

WILBUR BOHM

President N. A. T. A., 1942-1943

Athletic Trainers in the Service

OUT on the hard-packed cinder track at Athens, Georgia, half a dozen of the navy's pre-flight cadets were bounding a little awkwardly over the low hurdles while Ensign Freddie Wolcott, the world's champion, worked patiently to improve their form.

"This conditioning program sure does wonders for a boy," Head Trainer Hank Crisp commented. "Those kids have been here only a couple of days. Pretty soft and out of shape now, but look at them again in three months and you'll never recognize them. It's amazing how they'll develop."

Crisp, former University of Alabama athletic director, heads up a staff of seven former college trainers who were hand-picked for the United States Pre-Flight School at Athens, a remarkable array of trainer talent to be sure, but quite in keeping with navy pre-flight's superlative coaching staff which reads like an all-time All-American honor roll.

"All you have to do is prove to a boy that he really can master these things," Crisp continued. "Show him how to use his body, how to co-ordinate and develop his muscles, and you've got a different person overnight. His whole outlook changes. He takes new pride in himself, knows he's a man and not a hot-house plant. He can stand up and swap blow for blow without flinching. He can scale a wall, ford a stream, tackle the toughest obstacles, keep himself afloat at sea. In short, he develops what we call 'guts'—and that's pretty important in naval aviation."

Fritz Lutz nodded in agreement. "This war is teaching us old-timers a lesson. We're learning how short-sighted we Americans have all been in not making intramural athletics a compulsory part of every boy's program. It ought to start in high school where a lad is still young enough to overcome any physical deficiencies."

A short, round-faced fellow with great earnestness for his job, Lutz has been a popular figure on the Georgia campus since 1938 as head trainer for the university. Now with the navy, he roams the same athletic fields, gives his cadet charges the same expert attention he previously devoted to Frankie Sinkwich and the high-riding Georgia Bulldogs.

"Yes," said Eddie Wojecki, dipping into his kit bag for a roll of tape, "I'm afraid most of us college trainers and coaches have spent too much time in the past developing the ten per cent who were natural athletes and (Continued on page 39)

Mass Exercise

By Lieutenant M. J. Gary, U.S.N.R.
Director of the Mass Exercise Division

United States Navy Pre-flight School, Iowa City, Iowa
Former Football Coach, Western Michigan College

IN THE October issue of the Athletic Journal a general description of the Mass Exercise at the United States Navy Pre-Flight School at Iowa City was given, including the objectives, nomenclature, and illustrations of the basic positions. In the November issue the exercises evolved from the basic position of *Attention* were described and illustrated. A number of combination exercises were included. In this issue the exercises from the four basic positions of Crouch Sitting, Stoop Falling, Lying, and Backward Lying will be presented.

As we mentioned in the first article, we are indebted to Mr. Tommy Taylor of the Physical Education Staff of the United States Naval Academy for the general plan followed in the exercises as well as for the nomenclature and sequence used.

The staff of the Mass Exercise Division at the Iowa Pre-Flight School consists of four officers: Lieutenant (j.g.) Fred Stalcup, Lieutenant (j.g.) Tom Bukvich, Ensign Charles Ream, and Lieutenant Mike Gary. Daily direction of Mass Exercise by these four officers has brought about occasional change in activity particularly adaptable to our program here. Slight variations in nomenclature have crept in from daily usage. As the severe weather of an Iowa winter occasionally forces a part of our program under cover with the resulting limitation of space for activity, with an increasing number of cadets coming aboard weekly, and with the increase in the amount of time allotted to Mass Exercise, continual adjustment in the program is necessary. While we have retained, without exception, the exercises

initially suggested by Mr. Taylor at the Naval Academy, we have fitted into our program at Iowa City some of those exercises which have been used over a period of years by the members of our staff and have adapted them to the nomenclature as set up by the initial committee at Annapolis under the direction of Mr. Taylor.

As mentioned in the October article, the basic positions are: A—*Attention*, B—*Crouch Sitting*, C—*Stoop Falling*, D—*Lying*, and E—*Backward Lying*. The exercises from position A—*Attention* were described and illustrated in the November issue. The following are exercises from the remaining four basic positions.

From the basic position B—*Crouch Sitting*, we used the following exercises:
Exercise 29. From the position Crouch

Sitting, the knees are stretched (extended) with the hands remaining on the deck. Many of our cadets are unable to perform this exercise at first, but we suggest that, if it is necessary to pull the hands off the deck, the cadets straighten the knees and then attempt to bring the hands down to the deck rather than to keep the hands on the deck and fail to straighten the knees.

Exercise 30: From the position *Knees Stretch*, the heels are raised clear of the deck and lowered, the knees remaining fully extended. We have found that the position of *Heels Raise* should be continued only momentarily because there is a tendency for the leg muscles to tighten up. The *Heels Raise* exercise is less difficult from the next position, 31.

Exercise 31: From the position *Crouch Sitting*, the feet are placed well apart sideways with the knees extended simultaneously. I had not seen this position prior to its demonstration by Mr. Taylor, but I feel that it is an exceptionally good exercise. I find it necessary to caution the cadets not to place the feet too far backward as the position is assumed. From this position the position similar to 21 may be taken on the command of Trunk upward, arms sideways *Swing*, with the command for returning, Trunk forward, hands on the deck, *Place*.

Exercise 32: From the preceding position, the cadets are instructed to lean backward as far as possible without bending the knees or lifting the hands from the deck. Football coaches will find this

THIS is the third and last in a series of articles on Mass Exercise by M. J. Gary, Lieutenant U. S. N. R. Twenty-eight exercises from the basic position of *Attention* were described and illustrated in the November issue. Illustrations of the basic positions *Crouch Sitting* (B) *Stoop Falling* (C) *Lying* (D) and *Backward Lying* (E) are repeated in this issue from the October issue. The exercises described and illustrated in this article are developed from these four basic positions. Duplicate copies of the ATHLETIC JOURNAL containing the complete series will be furnished upon request to subscribers of this publication as long as the limited supply lasts.

The subject for the pictures is Aviation Cadet Laurence E. Colgrove of Birmingham, Michigan, who has completed his pre-flight training at the Iowa City School and has advanced to a naval air base.

The ATHLETIC JOURNAL is grateful to Lieutenant Gary for the excellent series of graphic and well-described exercises. These may well be adopted as the basic conditioning program by the many readers of this publication who are now called upon to inaugurate conditioning exercises in their schools.

All illustrations are "Official U. S. Navy Pictures."



exercise a very good "hamstring stretcher" and very beneficial for the internal lateral ligaments of the knees.

Exercise 33: From Exercise 31, the cadets lean forward so that most of the weight rests on the hands. The elbows and knees remain in an extended position. The hands or feet are not moved about on the deck.

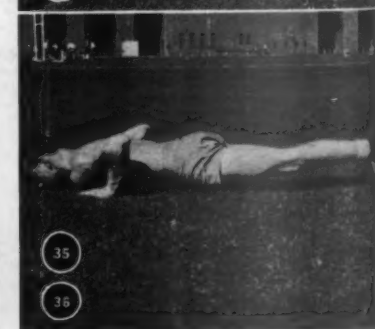
Exercise 34: From Exercise 31, the left or right knee is flexed until the buttocks rest on the heel of the foot upon which the weight of the body is placed. The right leg should remain fully extended and the right foot should be inverted so that the sole of the right foot remains flat

on the deck rather than in the position shown in Illustration 34. The hands should not be moved about on the deck.

Exercise 35: From Position B, the legs are fully extended to the rear and, at the same time, the elbows are flexed so that the chest lightly touches the deck with the trunk and legs fully extended and rigid. The weight should be supported on the toes and hands.

Basic Position C: From B, we assume the position of *Stoop Falling* as shown in Illustration C. Mr. Taylor stressed the fact that the hands should be pointed partially inward rather than straight forward as shown in the illustration. We believe

Exercise	Cautionary	Execute	Returning to Starting
B. (From A) Crouch Sitting.....	Place	Atten	Shun
29. (From B) Knees.....	Stretch	Knees	Bend
30. (From 29) Heels.....	Raise	Heels	Sink
31. (From B) Feet sideways, knees	Stretch	Crouch sitting.....	Place
32. (From 31) Trunk backward..	Lean	Trunk center.....	Lean
33. (From 31) Trunk forward..	Lean	Trunk center.....	Lean
34. (From 31) Left (right) knee	Bend	Left (right) knee.....	Stretch
35. (From B) Feet backward, arms	Bend	Crouch sitting.....	Place
C. (From B) Stoop Falling.....	Place	Crouch sitting.....	Place
36. (From C) Arms.....	Bend	Arms	Stretch
37. (From C) Arms bending, right (left) leg.....	Raise	Arms stretching, right (left) leg	Sink
38. (From C) Left (right) foot forward outside the hand.	Place	Left (right) foot backward..	Place
39. (From C) Side falling on the right (left) arm, left (right) hip.....	Firm	Stoop falling	Place
40. (From 39) Back stoop falling.	Place	Side falling on the right (left) arm, left (right) hip.....	Firm
41. (From 40) Left (right) leg forward	Raise	Left (right) leg.....	Sink
42. (From 40) To sitting.....	Place	Back stoop falling.....	Place
43. (From C) Forward lying....	Place	Stoop falling.....	Place
D. (From 43) To lying.....	Place	To forward lying.....	Place
44. (From D) Legs backward, trunk backward	Bend	To lying	Place
E. (From D) To backward lying, on the left (right) side.....	Turn	To lying on the left (right) side	Turn
45. (From E) Arms sideways and upward	Swing	Arms sideways and downward	Swing
46. (From E) Heels clear of the deck	Raise	Heels to the deck.....	Sink



that this correction is most proper, but we have not insisted on this particular point at the Iowa Pre-Flight School, as you will notice in the illustrations.

Exercise 36: From Position B, the arms are flexed at the elbow to assume the position similar to Position 35. By executing this command on a count—1, 2, 3, 4, we have the activity commonly known as Push-Ups.

Exercise 37: From Position C, the right (left) leg is extended at the hip simultaneously with the bending of the arms. The knee remains extended. This exercise is best executed on a count of four.

Exercise 38: From Position C, the left foot is brought forward outside the hand by flexing the hip, knee, and ankle. The buttocks should not be raised. This exercise, again, is best executed on a count. We also use a variation by placing the foot forward between the hands rather than outside. We find both very beneficial as stretching exercises.

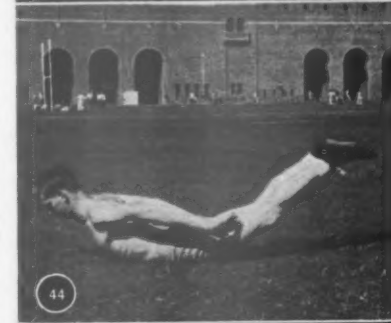
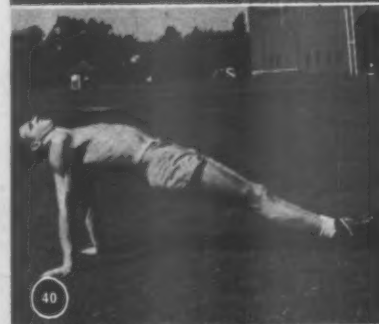
Exercise 39: From Position C, the body is turned and held rigid with the weight supported on one arm fully extended with the opposite arm in a position similar to hips firm. From this position the command, left (right) leg sideways *Raise* may be given, depending on which arm is supporting the trunk.

Exercise 40: From Position 39, the hand which has been in the position *Hips Firm* is placed on the deck to the rear in line with the supporting hand and the trunk is turned and held in a rigid position with the head backward in line with the trunk, the weight resting on the heels and the hands as shown in Illustration 40. Caution must usually be given not to permit the body to sag at the hips. The position may be assumed directly from Position C, *Stoop Falling*, by giving the command, *Back stoop falling*, turning on the right (left) arm, *Place*.

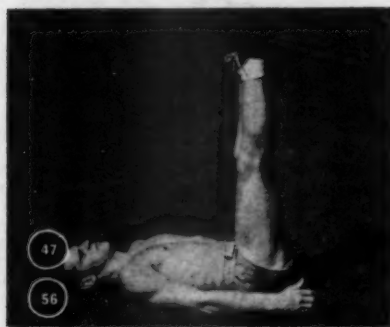
Exercise 41: From Position 40, alternate legs may be raised forward.

Exercise 42: From Position 40, the buttocks may be lowered to the deck to assume a sitting position. From the sitting position, we may assume a backward lying position as indicated in Illustration D, with the command *Backward Lying*, *Place*, the trunk merely lowered to the deck and the arms stretched downward alongside of the trunk to assume a supine position.

Exercise 43: From Position C, the trunk and thighs are lowered so that the anterior surface rests on the deck. From the forward lying position the hands are stretched downward alongside the trunk. At the Iowa Pre-Flight School, we have departed from the original nomenclature set up by the committee. Illustration 43 indicates the position which we term *Forward Lying* as distinguished from Position D which we call *Lying*. Mr. Taylor describes Position 43 as *Bend stoop falling*.



Exercise 44: From Position E, the legs and trunk are bent backward or extended so that the weight of the body rests on the anterior abdominal surface. This exercise may be done by first bending the legs backward and lowering and then bending the trunk backward and lowering. If this exercise is done with the arms in the position of Neck Rest to make the exercise more rigorous, the proper command for returning to starting would be—Legs and trunk to the deck *Sink*, rather than Lying Place, which would again bring the arms to a position alongside the trunk. Care should be used in prescribing this exercise



to avoid back strain. We find it difficult for the average cadet.

Position E: From Position D, the left arm remains fully stretched alongside the trunk, the palm inward, fingers together, and the thumb along the forefinger. The right arm is placed to the side of the body between the shoulders and waist, and at the command *Turn*, the cadet rolls from a prone to a supine position. To return from a supine to a prone position, reverse the procedure. As soon as the body is turned, the arm, which was used to push off, is again fully extended along the trunk.

Exercise 45: From position E, the arms are swung sideways and upward to assume a position for subsequent exercises. This position may also be assumed with the command Arms forward and upward—*Swing*. The arms are swung either along the deck or forward from the position at the sides to a position above the head, depending on which command is given.

Exercise 46: From Position E, the heels are raised clear of the deck approximately six inches. With our beginning cadets we have difficulty keeping this distance down to six inches. The knees should remain fully extended.

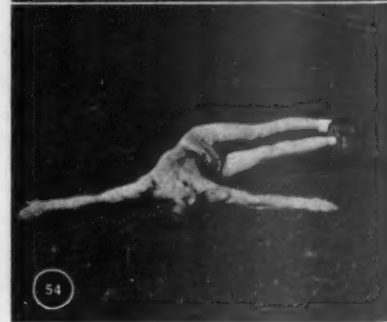
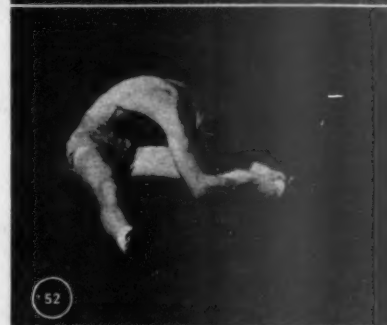
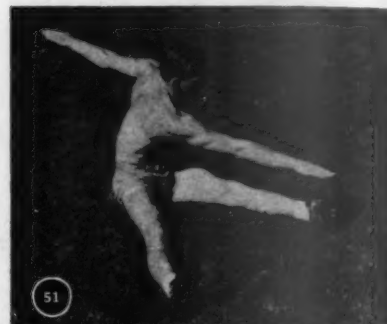
Exercise 47: From either position E or Exercise 46, the legs are raised forward, bending only at the hips with the knees straight to a vertical position. The buttocks should remain on the deck without flexion of the trunk. From the several exercises which involve the forward raising of the legs, the command is usually given, Heels clear of the deck, legs *Sink*, so that the feet are not dropped to the deck with a thud. Complete control of the legs should be maintained throughout the movement to give both a shortening and lengthening contraction of the belly muscles. (In this illustration the reader will note that the hands are in a poor position. The fingers should be fully extended with the thumb along the forefinger.)

Exercise 48: From Position 45, the trunk is bent forward (flexed) to a sitting position with the hands touching the toes, the arms maintaining an upward position throughout the swing. This movement is commonly referred to as a "sit-up." The proper command for returning to Position 45, if the nomenclature is consistent, should be—Trunk upward *Stretch*; but we find that the nomenclature Trunk to the deck, *Sink*, is more readily understood by the cadet. As the reader will notice, the commands involving the movements of the arms and legs in the prone and supine positions were similar to the commands used when the cadet was in the position of Attention. Without repeated explanation we find, however, that on the command of Trunk upward *Stretch* from the sitting position, the cadet is likely to remain in an erect sitting position rather than assume a supine position.

Exercise 49: From Position 45, the legs are raised forward with the arms swinging forward so that the hands touch the toes. The legs and arms will be approximately parallel in a vertical position, due to the flexion necessary in the trunk.

Exercise 50: From Position E, the combination movement indicated is accomplished. The trunk should be erect and the knees straight.

Exercise 51: From Position 50, the trunk is twisted to the right with the right hand touching the left foot, and alternating with the opposite hand and foot. If a count of four is used, on the even



<i>Exercise</i>	<i>Cautionary</i>	<i>Execute</i>	<i>Returning to Starting</i>
47.	(From E or 46) Legs forward	<i>Raise</i>	Legs to the deck..... <i>Sink</i>
48.	(From 45) To sitting, with hands touching the toes, arms forward.....	<i>Swing</i>	Trunk to the deck, arms upward..... <i>Swing</i>
49.	(From 45) Legs forward raising, with hands touching the toes, arms forward.....	<i>Swing</i>	Legs to the deck, arms upward..... <i>Swing</i>
50.	(From E) To sitting, with legs parting, arms sideways.....	<i>Swing</i>	To backward lying..... <i>Place</i>
51.	(From 50) Trunk twisting, right hand touching left foot (alternating).....	<i>Place</i>	To sitting, arms sideways.. <i>Swing</i>
52.	(From 50) Hands grasping left (right) ankle, trunk forward and downward with a pull.....	<i>Bend</i>	To sitting, arms sideways.. <i>Swing</i>
53.	(From E) Arms swinging sideways, legs forward....	<i>Raise</i>	Arms swinging downward, legs to the deck..... <i>Sink</i>
54.	(From 53) Feet sideways to the right (left) clear of the deck.....	<i>Sink</i>	Legs forward..... <i>Raise</i>
55.	(From E) Heels raising, knees upward.....	<i>Bend</i>	Knees stretching, heels to the deck..... <i>Sink</i>
56.	(From 55) Legs forward.....	<i>Stretch</i>	Knees..... <i>Bend</i>
57.	(From 53) Clear of the deck, legs lowering and raising, right leg first 1, 2, 3, 4....		Legs to the deck..... <i>Sink</i>
58.	(From position left (right) leg forward— <i>Raise</i> Arms sideways.....	<i>Swing</i>	Left (right) leg forward.... <i>Raise</i>
59.	(From E) Feet on the deck, knees upward.....	<i>Bend</i>	Legs downward..... <i>Stretch</i>
60.	(From 59) Trunk forward, hands grasping the ankles with a pull.....	<i>Bend</i>	Trunk upward..... <i>Stretch</i> To lying..... <i>Place</i>

Correction on Exercise 5 in the November issue. The command should be Head upward (not forward) *Stretch*.



numbers two and four, the cadet should assume the position indicated in Illustration 50. In other words, he should come to the sitting position with the arms sideways between the alternate touching of the hands to the feet. The legs should be parted slightly more than shown in the illustration.

Exercise 52: From Position 50, the hands are brought forward to grasp alternate ankles and the trunk is pulled forward and downward with the forehead being placed as near as possible to the anterior surface of the leg.

Exercise 53: From Position E, the arms are swung sideways with the legs raising forward. This may be done in two separate exercises. The exercise is placed here primarily to show the position for the subsequent exercise.

Exercise 54: From Position 53, the legs are lowered together sideways with a twist of the trunk but with the feet clear of the

deck (six inches), the legs remaining at right angles to the trunk.

Exercise 55: From Position E, the heels are raised clear of the deck and the knees and hips are flexed. Again you will notice a poor position of the hands in the illustration.

Exercise 56: From Position 55, the knees are extended so that the legs are brought into a vertical position similar to that indicated in Position 47.

Exercise 57: From Position 53, one leg is raised forward to a vertical position and the other leg with heels just clear of the deck. A scissor movement is then executed as one leg is lowered and the other leg raised. This movement lends itself readily to a count.

Exercise 58: From a position similar to Position 57, except that one foot is on the deck with the other leg raised to a vertical position, the leg in a raised position is brought over toward the deck to

the opposite side with a twisting movement of the trunk.

Exercise 59: From Position E, the feet remain on the deck, but the knees are flexed to prepare for the subsequent exercise. A better position for the arms would be with, Arms sideways and upward *Swing*, as in Position 45.

Exercise 60: From Position 59, the knees are parted and the trunk is raised to a forward position between the knees. The hands are swung forward to grasp the ankles and the trunk is pulled forward. To return to lying, the command, *Trunk upward Stretch* may be omitted, and on the command *Lying Place*, the legs are stretched downward, the trunk stretched upward, and the arms stretched downward along the trunk.

As mentioned in the article in the October issue, many combinations of the above exercises in addition to those suggested may be included. The sequence should be

varied to include in each exercise session a number of exercises from each basic position. Variation in the exercises given from day to day relieves monotony and keeps the participant alert.

At the Iowa Pre-Flight School the Mass Exercise period immediately precedes each sports period and the primary objective is a stretching and loosening up, but the exercises may be given with sufficient rapidity and continued long enough to constitute a real conditioning workout where space and time are limited.

The reasons for these three articles were the daily requests received for information on the calisthenics here from others engaged in the nationwide physical training program in the present emergency. We are indebted to the Trainers Journal for this opportunity to reply to these letters. May we also again express our appreciation to Mr. Tommy Taylor who found time in an already full day at the United

States Naval Academy at Annapolis to meet with the Mass Exercise Committee and give them valuable suggestions and recommendations out of his long experience.

We have described one small phase of the huge physical training program for naval aviation set in motion by the vision and perseverance of Commander Tom Hamilton.

May we suggest that those interested in calisthenics or other physical conditioning activity in the nationwide physical fitness program spend a minimum amount of time on nomenclature and procedure and a maximum amount of time in making some phase of the national physical fitness program available to as many persons as possible, so that we may muster the strength and endurance to preserve those institutions which we feel are essential to our way of life. This completes the series begun in October.

Elbow Injuries

By Roland Bevan

Athletic Trainer, United States Military Academy, West Point

THE curing of athletic injuries depends, to a great extent, on the boy. A healthy, eager athlete responds much better to treatment than does the one who "dead-beats" until the last practice is over. The latter generally keeps the coach worried until the morning of the game, when he assures him that he is in perfect shape.

Some boys shake off sprains and bruises almost as fast as they acquire them, and others never seem to recover, even with more and longer treatments.

In dealing with the subject at hand, *Elbow Injuries*, may I say in my experience as a coach and a trainer, that the common run of these injuries are quite less severe in the process of curing than are charley horses, sprained ankles, sprained knees or shoulder separations.

Common elbow injuries generally consist of (a) contusions where the bursa swells and resembles an inverted cone; (b) twisting or over-stretching of the tissues, tendons, and ligaments called hyperflexion and hyper-extension, where sometimes one of the condyles of the humerus is torn away; (c) a plain bone bruise of the sharp bone of the elbow, the olecranon.

The treatment of (a) bruised bursa is simple, even though the puffed effect may appear as something serious. Shape a piece of ice to fit the injury and place a piece of wet gauze over the ice. Place this pack on the swollen bursa and wrap a towel around it to hold it in place. Keep this ice pack on for at least a half hour. Upon removing it apply some counter-irritant like analgesic balm, iodox, or ichthyol to the swollen area, then wrap snug-

ly with a cotton dressing. Over this wrap, place a piece of half-inch thick foam rubber, large enough in circumference to cover the elbow; over the rubber wrap an elastic ace bandage in an interwoven manner so as not to cut the circulation but tight enough to hold the rubber compress snugly against the elbow. Repeat the ice treatment a second day and apply the compress as mentioned above. By the end of the second day, the swollen bursa should be back to normal. From then on use the proper elbow pad. In case of soreness from the bruise, use a whirlpool bath after practice. The elbow may also be wrapped in a warm poultice of antiphlogistine covered with wax paper. This treatment will aid nature in the complete healing of the injury.

The next class of elbow injury marked (b) is the severely strained type. If the x-ray shows a condyle torn away with the strained condition, do not place the elbow in a cast, because immobility will cause stiffness of the joint. The medical men with whom I have been associated will bear me out in the statement that a condyle will not remain in place when torn away, regardless of a cast. Time will allow nature to dissolve and carry this fragment away. Treat the injury early with ice. Submerge the entire elbow in a basin of cracked ice and water. Leave it there for one-half to a full hour. Then place it in a whirlpool of hot water for about ten minutes to relax it. Use a warm poultice or apply some balm that will stimulate warmth. Wrap with cotton dressing, over which interlace an ace bandage. Place the arm in a sling. Repeat the treatment above, using the whirlpool

about a half hour instead of ten minutes. Wrap as above, using the sling as a support. Give the boy at least three treatments daily until he can bend his arm rather freely. Then apply light massage after the treatment. A trainer should have available proper hinge-braces that will keep the arm at the proper angle so as not to aggravate the tear within the joint. The brace should also add strength, as well as protection. As soon as the brace can be used send the boy to practice. The exercise and association on the playing field with his fellow players will aid greatly in his mental build-up, and the general healing of his injury.

For the type (c), where the olecranon bone is bruised, if the elbow swells place it in an ice solution, follow with a rubber compress. The next treatment should be ice followed by an infra-red lamp or hot fomentations. Be sure the injured boy has an elbow pad, well padded with foam rubber set in a fibre cup. Recurrences of such injuries sometimes develop into infections. Always treat any bruise until the soreness is entirely gone.

As a supplement to the above types of injuries mentioned, the straining of the elbow by throwing may be mentioned. To this sort of injury that aches and causes the elbow to become weak, use a whirlpool, followed by massage and keep the injured part wrapped and warm. Gripping a piece of sponge rubber while the arm is submerged in the whirlpool is all the exercise that should be taken with such an injury. The ache comes from a strained nerve. Sometimes numbness will result in the little finger from a small nerve fibre being torn. This numbness

many times also follows a severe blow on the "crazy bone" of the elbow.

On all of the above injuries where the elbow joint is involved, use corrective exercises until all of the tissues regain their normal strength.

Athletic Trainers in the Service

(Continued from page 32)

letting the other 90 per cent shift for themselves."

Wojecki went over, wound the tape securely around a cadet's instep, sent him back into action. Like Lutz, Wojecki has a small, stubby build, but down at Louisiana Tech, where he served for the past nine years, they consider him one of the best trainers the Southwest has had. Eddie learned physical education in Poland at the University of Warsaw.

"There's a typical example for you," Wojecki remarked as one of the new cadets stumbled clumsily over a hurdle. "Kid's like that come here by the dozens. They've never known the meaning of muscular co-ordination. But we'll make fliers out of them yet—just you wait and see."

Freddie Wolcott spoke quietly to the cadet, pointed out the reason for his

failure, told him to try again. Like all pre-flight coaches, the former Rice Institute star seems to have unlimited patience. Cadets thrive on encouragement, the navy reasons, so temperamental coaches have no place in the program.

A tour of the University of Georgia grounds reveals the scope of the navy's outdoor conditioning program. Sports requiring vigorous physical effort and teamwork receive primary emphasis. Spread out over a two-mile area the playing fields bristle with activity—football, soccer, military track, volley ball, and the ingeniously contrived obstacle course that calls for the ultimate in agility, courage, resourcefulness, and general physical toughness. The whole program aims at developing fighting pilots injured to physical and nervous strain, with highly developed powers of co-ordination, speed of action, quick decision, anticipation, timing and self discipline.

Mickey O'Brien, burliest and most recent addition to the pre-flight school's staff of trainers, was standing at the foot of one of the obstacles grinning appreciatively at the headlong scramble of the Blue cadets against the Yellows. It was nip and tuck all the way.

O'Brien hails from the University of Tennessee where, as head trainer since 1938, he built himself a reputation.

(Continued in January)

NOW AVAILABLE

Research and Writings on
Training, Conditioning,
Treatment of Athletic
Injuries and Corrective
Work

by

Wilbur H. S. Bohm
Washington State College

Price \$1.25

WRITE

WILBUR H. S. BOHM
Pullman, Washington

TAPING PICTURE REPRINTS

To meet the demand for taping pictures used in last year's Training Section, reprints have been made of Taping for Ankle Injuries, Foot Injuries, Knee Injuries, Hamstring Tears. (Pictures only, no reading matter.)

Price twenty-five cents

THE TRAINERS JOURNAL
6858 Glenwood Avenue
Chicago, Illinois

**TIME TO PUT
THE "HEAT" ON!**



WHEN that star guard of yours limps into the dressing room with a charley horse — that's the time to apply the "moist heat" of ANTIPHLOGISTINE.

Here is a medicated poultice—known and used by crack trainers the country over—for the bruises and sprains and scrapes that go with basketball. These men know the value of prolonged "moist heat" in the form of poultices for relieving

the pain, swelling and soreness.

ANTIPHLOGISTINE supplies this valuable "moist heat" for many hours. It helps speed recovery—without interfering with the athlete's rest. See that you have ANTIPHLOGISTINE ready for instant use in many emergencies.



Antiphlogistine

A product of the Denver Chemical
Mfg. Co., New York, N. Y.

ANTIPHLOGISTINE HELPS YOU "KEEP 'EM IN THE GAME"

Announcements

Army and Navy Insignia

Posters showing the insignia of the Army and Navy may be secured by writing the Witchell Sheill Company, 1635 Augusta Blvd., Chicago.

Taping Films

Taping Technique a, 16 mm film—both sound and silent—is available for bookings. Trainers and coaches should address their requests to The Bike Web Company, 41 West 25th St., Chicago.

Handbook on Athletic Injuries

If you haven't secured your Handbook on Athletic Injuries, communicate at once by card or letter with The Denver Chemical Mfg. Co., 163 Varick Street, New York City.

Football Bulletins

An attractive bulletin, written by Frank Leahy of Notre Dame, with many excellent illustrations, teaches the fundamentals of blocking, tackling and carrying the ball. Secure your copy at your Keds dealer or address your request to Frank Leahy, Keds Sports Department, 1230 Sixth Avenue, New York City.

Seal-O-San

The new edition of Seal-O-San Basketball Coaches Digest is ready for distribution. Play diagrams, illustrations, articles on offense, defense, and fundamentals are included in this attractive Digest. Send the coupon on Cover 2 of this issue or a card to Huntington Laboratories, Inc. Huntington, Indiana.

Converse Basketball Year Book

The 1941-42 edition of the Converse Basketball Year Book contains authoritative articles covering many phases of basketball, pictures of nearly three hundred teams and of thousands of players. The edition is limited in number. Write at once for your copy to the Converse Rubber Co., Malden, Mass.

Footwork in Sports

The third of the Series on Footwork in Sports is ready for distribution. Copies of the two preceding series—Line Play and Backfield Play are still available. Keep your series of these posters complete. Write John T. Riddell, Inc., 1259 Wood Street, Chicago.

"Shoot"

Shoot, a colorful new book tells the story of A. G. Spalding's contribution to the war program, both in the Armed Forces and on the home front. Write for your copy to Spalding's Advertising Department, 19 Beekman Street, New York City.

The Observer

Do you have your name on the Ivory System mailing list to receive the monthly issues of *The Observer*? Full of helpful suggestions on the care of athletic equipment, so very important these days. Write the Ivory System, Peabody, Mass.

INDEX TO ADVERTISERS

Bohm, Wilbur (Book on Training)	30
Converse Rubber Co.	4
Dean, Everett (Progressive Basketball)	22
Denver Chemical Co.	39
Goldsmith Sports Equipment Co.	21
Hillerich and Bradsby	25
Hotel Sherman	29
Huntington Laboratories, Inc.	Cover 2
Ivory System	Cover 4
Kahnfast Athletic Fabrics	3
King Sportswear Co.	28
National Sports Equipment Co.	28
O'Shea Knitting Mills	20
Peterson and Co.	28
Rawlings Manufacturing Co.	19
Reach, Wright and Ditson	15
Riddell, Inc., John T.	23
Safe Play Goggle Co.	20
Spalding and Brothers, A. G.	1
United States Rubber Co.	27
Voit Rubber Corp., W. J.	23
Wilson Sporting Goods Co.	17

High School Victory Corps Insignia

For Complete
Information See
Page 30



**Sea
Service
Division**



**Community
Service
Division**



**Land
Service
Division**



**General
Membership**



**Production
Service
Division**



**Air
Service
Division**

It Can't Be Business Exactly as Usual!



You who love **ATHLETICS** and appreciate their importance in the War Effort will determine to carry on regardless of obstacles—and it's the determination of the **IVORY SYSTEM** to do so, also, without regard to the profit and loss column.

We believe that we are contributing to the War Effort by prolonging the life of Athletic Equipment, and we too have had innumerable difficulties to meet and overcome in attempting to provide the same prompt and efficient service—so characteristic of the **IVORY SYSTEM** for so many years.

Our business has been hurt through the loss of many of our boys who have gone into the service, and those of us who are left behind are pledged to do our utmost to serve the Schools and Colleges of America to the very limit of our ability.

We ask for your patient cooperation.

Ivory System

**RECONDITIONERS
OF ATHLETIC
EQUIPMENT**

PEABODY, MASSACHUSETTS

A stylized, black silhouette of a witch wearing a pointed hat and riding a broomstick. The broomstick is angled upwards and to the right, passing behind the word "System". The witch's body is also angled in the same direction. The entire logo is rendered in a high-contrast, graphic style.